Nos. 2023-1582, 2023-1586

IN THE

United States Court of Appeals for the Federal Circuit

WIRELESS DISCOVERY LLC,

Plaintiff-Appellant,

v.

THE MEET GROUP, INC. AND EHARMONY, INC.,

Defendants-Appellees.

ON APPEAL FROM THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE, CASE NOS. 2022-480 AND 2022-484,
HON. GREGORY B. WILLIAMS

[CORRECTED] JOINT APPENDIX

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IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

WIRELESS DISCOVERY LLC, Plaintiff, v. EHARMONY, INC., Defendant.	C.A. No. 22-480-GBW
WIRELESS DISCOVERY LLC, Plaintiff, v. THE MEET GROUP, INC., Defendant.	C.A. No. 22-484-GBW

MEMORANDUM ORDER

Presently before this Court is Defendant eHarmony, Inc.'s ("eHarmony") and Defendant The Meet Group, Inc.'s ("The Meet Group") Motions to Dismiss for Failure to State a Claim under Federal Rule of Civil Procedure 12(b)(6). C.A. No. 22-480, D.I. 30; C.A. No. 22-484, D.I. 12. The Court has reviewed the parties' briefing, No. 22-480, D.I. 31, D.I. 39, D.I. 40; No. 22-484,

D.I. 13, D.I. 20, D.I. 23,[1] and heard oral argument on December 14, 2022.[2] ("Tr. __"). For the reasons below, the Court GRANTS-IN-PART and DENIES-IN-PART eHarmony's Motion to Dismiss, No. 22-480, D.I. 30, and GRANTS The Meet Group's Motion to Dismiss, No. 22-484, D.I. 12.

I. BACKGROUND

On April 13, 2022, Plaintiff Wireless Discovery LLC ("Wireless Discovery") sued eHarmony and The Meet Group in separate patent infringement cases asserting infringement of U.S. Patent No. 9,264,875 ("the '875 patent"). No. 22-480, D.I. 1; No. 22-484, D.I. 1. Wireless Discovery amended its complaint in the eHarmony case on July 18, 2022, asserting three additional patents: U.S. Patent Nos. 9,357,352 (the "'352 patent"), 10,321,267 (the "'267 patent"), and 10,334,397 (the "'397 patent"). No. 22-480, D.I. 21.

The asserted patents are all from the same patent family and are continuations-in-part of U.S. Patent No. 8,914,024, which is not asserted in either case. The asserted patents all relate generally to the idea of social networking, i.e., discovering members of the same social network

[1] The parties also filed letter briefs identifying which U.S. Supreme Court or Federal Circuit case(s) they contend is most similar to the patent(s)-at issue. No. 22-480, D.I. 48, D.I 49; No. 22-484, D.I. 38, D.I. 39.

[2] The Court also heard oral argument on Defendant Coffee Meets Bagel, Inc.'s, Defendant Down App, Inc.'s, Defendant Grinder, Inc.'s, and Defendant Hily Corp.'s Motion to Dismiss in *Wireless Discovery LLC v. Coffee Meets Bagel, Inc.*, No. 22-478, *Wireless Discovery LLC v. Down App, Inc.*, No. 22-479, *Wireless Discovery LLC v. Grindr, Inc.*, No. 22-481, and *Wireless Discovery LLC v. Hily Corp.*, No. 22-482. C.A. No. 22-478, D.I. 24; C.A. No. 22-479, D.I. 25; C.A. No. 22-481, D.I. 27; C.A. No. 22-482, D.I. 25. The Court issued a similar but separate opinion in those cases. The Court similarly finds in those cases that the asserted patents are not patent eligible under 35 U.S.C. § 101.

in the same vicinity and exchanging member's personal information. *See* No. 22-480, D.I. 21-5 at 1:16-22 ("The invention relates to discovering members of a social network by associating their personal attributes to the mobile device for the purpose of exchanging information using mobile communication devices and, in particular, exchanging personal information between one or more mobile communication devices."); No. 22-484, D.I. 1-3 at 1:16-22 (same).

Individuals can "use their mobile phones to discover others by personal attributes, such as by photos and names, after which, the two parties can exchange information over the internet." No. 22-480, D.I. 21-5 at 2:4-7; No. 22-484, D.I. 1-3 at 2:4-7. These individuals can discover other members who are located "within a vicinity." No. 22-480, D.I. 21-5 at 4:4-6; No. 22-484, D.I. 1-3 at 4:4-6. The "vicinity" is determined by a location that was reported to the server, in the geographic area specified by a user's "search criteria," or by a location recorded in a database. No. 22-480, D.I. 21-5 at 5:4-15; No. 22-484, D.I. 1-3 at 5:4-15.

Individuals can send "invitations" to other members in the vicinity. No. 22-480, D.I. 21-5 at 5:14-22; No. 22-484, D.I. 1-3 at 5:14-22. "The invitation may take the form of a social card, VCard, or other manner of engaging another person in a social atmosphere, or even a business setting such as a meeting, trade show, conference, etc." No. 22-480, D.I. 21-5 at 5:18-22; No. 22-484, D.I. 1-3 at 5:18-22. If a user accepts the "invitation," "members can elect to exchange or send personalized, intimate contact information over the internet after the users have discovered each other." No. 22-480, D.I. 21-5 at 4:10-12; No. 22-484, D.I. 1-3 at 4:10-12. The invention "provides a system and method that enables free discovery of others who also desire social interaction, but without being constrained by hardware compatibility issues inherent in mobile devices by different manufacturers." No. 22-480, D.I. 21-5 at 2:20-24; No. 22-484, D.I. 1-3 at 2:20-24.

II. LEGAL STANDARD

a. Motion to Dismiss Under Rule 12(b)(6)

To state a claim on which relief can be granted, a complaint must contain "a short and plain statement of the claim showing that the pleader is entitled to relief . . . ." Fed. R. Civ. P. 8(a)(2). Such a claim must plausibly suggest "facts sufficient to 'draw the reasonable inference that the defendant is liable for the misconduct alleged.'" *Doe v. Princeton Univ.*, 30 F.4th 335, 342 (3d Cir. 2022) (quoting *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009)) (citing *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 557 (2007)). "A claim is facially plausible 'when the plaintiff pleads factual content that allows the court to draw the reasonable inference that the defendant is liable for the misconduct alleged.'" *Klotz v. Celentano Stadtmauer & Walentowicz LLP*, 991 F.3d 458, 462 (3d Cir. 2021) (quoting *Iqbal*, 556 U.S. at 678). But the Court will "'disregard legal conclusions and recitals of the elements of a cause of action supported by mere conclusory statements.'" *Princeton Univ.*, 30 F.4th at 342 (quoting *Davis v. Wells Fargo*, 824 F.3d 333, 341 (3d Cir. 2016)). Under Rule 12(b)(6), the Court must accept as true all factual allegations in the Complaint and view those facts in the light most favorable to the plaintiff. *See Fed. Trade Comm'n v. AbbVie Inc*, 976 F.3d 327, 351 (3d Cir. 2020).

b. Collateral Estoppel

Collateral estoppel (i.e., issue preclusion) precludes parties from relitigating an issue that they previously had a full and fair opportunity to litigate. *See Montana v. United States*, 440 U.S. 147, 153 (1979). Regional circuit law governs the general procedural question of whether collateral estoppel applies. *See ArcelorMittal Atlantique et Lorraine v. AK Steel Corp.*, 908 F.3d 1267, 1274 (Fed. Cir. 2018). "However, for any aspects that may have special or unique

application to patent cases, Federal Circuit precedent is applicable." *Aspex Eyewear, Inc. v. Zenni Optical Inc.*, 713 F.3d 1377, 1380 (Fed. Cir. 2013) (citation omitted).

Under Third Circuit law, collateral estoppel applies when "(1) the identical issue [was] previously adjudicated; (2) the issue [was] actually litigated; (3) the previous determination of the issue [was] necessary to the decision; and (4) the party being precluded from relitigating the issue [was] fully represented in the prior action." *Stone v. Johnson*, 608 F. App'x 126, 127 (3d Cir. 2015); *see also Jean Alexander Cosmetics, Inc. v. L'Oreal USA, Inc.*, 458 F.3d 244, 249 (3d Cir. 2006). "The party seeking to effectuate an estoppel has the burden of demonstrating the propriety of its application." *Suppan v. Dadonna*, 203 F.3d 228, 233 (3d Cir. 2000).

c. Attorney Fees

Under 35 U.S.C. § 285, "[t]he court in exceptional cases may award reasonable attorney fees to the prevailing party." An "exceptional" case under § 285 is "one that stands out from others with respect to the substantive strength of a party's litigating position (considering both the governing law and the facts of the case) or the unreasonable manner in which the case was litigated." *Octane Fitness, LLC v. ICON Health & Fitness, Inc.*, 572 U.S. 545, 554 (2014). "The party seeking fees must prove that the case is exceptional by a preponderance of the evidence, and the district court makes the exceptional-case determination on a case-by-case basis considering the totality of the circumstances." *Energy Heating, LLC v. Heat On-The-Fly, LLC*, 15 F.4th 1378, 1382 (Fed. Cir. 2021), *cert. denied*, 142 S. Ct. 1367 (2022) (citation omitted). "[A] case presenting either subjective bad faith or exceptionally meritless claims may sufficiently set itself apart from mine-run cases to warrant a fee award." *Octane Fitness*, 572 U.S. at 555.

d. Patent Eligible Subject Matter

Patentability under 35 U.S.C. § 101 is a threshold legal issue. *Bilski v. Kappos*, 561 U.S. 593, 602 (2010). Section 101 inquiry is properly raised at the pleading stage if it is apparent from the face of the patent that the asserted claims are not directed to eligible subject matter. *Cleveland Clinic Found. v. True Health Diagnostics LLC*, 859 F.3d 1352, 1360 (Fed. Cir. 2017), *cert. denied*, 138 S. Ct. 2621 (2018); *see also SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1166 (Fed. Cir. 2018) (stating that patent eligibility "may be, and frequently has been, resolved on a Rule 12(b)(6) or (c) motion"); *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1097 (Fed. Cir. 2016) (stating that "it is possible and proper to determine patent eligibility under 35 U.S.C. § 101 on a Rule 12(b)(6) motion" (quoting *Genetic Techs. Ltd. v. Merial L.L.C.*, 818 F.3d 1369, 1373–74 (Fed. Cir. 2016))); *Voter Verified, Inc. v. Election Sys. & Software LLC*, 887 F.3d 1376, 1379 (Fed. Cir. 2018) (affirming Rule 12(b)(6) dismissal based on § 101 patent ineligibility). This is, however, appropriate "only when there are no factual allegations that, taken as true, prevent resolving the eligibility question as a matter of law." *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1128 (Fed. Cir. 2018).

Section 101 of the Patent Act defines patent-eligible subject matter. It states, "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title." 35 U.S.C. § 101. The Supreme Court has held that there are exceptions to § 101. "Laws of nature, natural phenomena, and abstract ideas are not patentable." *Alice Corp. Pty. v. CLS Bank Int'l*, 573 U.S. 208, 216 (2014) (internal quotation marks and citation omitted). "[I]n applying the § 101 exception, [the court] must distinguish between patents that claim the 'building blocks' of human ingenuity and those that integrate the building blocks into

something more[] thereby 'transforming' them into a patent-eligible invention. The former 'would risk disproportionately tying up the use of the underlying' ideas, and are therefore ineligible for patent protection. The latter pose no comparable risk of pre-emption, and therefore remain eligible for the monopoly granted under our patent laws." *Id.* at 217 (cleaned up).

The Supreme Court's *Alice* decision established a two-step framework for determining patent-eligibility under § 101. In the first step, the court must determine whether the claims at issue are directed to a patent ineligible concept. *Id.* In other words, are the claims directed to a law of nature, natural phenomenon, or abstract idea? *Id.* If the answer to the question is "no," then the patent is not invalid for teaching ineligible subject matter under § 101. If the answer to the question is "yes," then the court proceeds to step two, where it considers "the elements of each claim both individually and as an ordered combination" to determine if there is an "inventive concept—i.e., an element or combination of elements that is sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself." *Id.* at 217–18 (alteration in original). "A claim that recites an abstract idea must include 'additional features' to ensure that the [claim] is more than a drafting effort designed to monopolize the [abstract idea]." *Id.* at 221 (internal quotation marks and citation omitted). Further, "the prohibition against patenting abstract ideas cannot be circumvented by attempting to limit the use of [the idea] to a particular technological environment." *Id.* at 222 (quoting *Bilski*, 561 U.S. at 610–11). Thus, "the mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention." *Id.* at 223. "The question of whether a claim element or combination of elements is well-understood, routine and conventional to a skilled artisan in the relevant field," which underlies the second step of *Alice*, "is a question of fact. Any fact, such as

this one, that is pertinent to the invalidity conclusion must be proven by clear and convincing evidence." *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1368 (Fed. Cir. 2018).

III. DISCUSSION

a. Collateral Estoppel

Defendants eHarmony and The Meet Group argue claims 1 through 9 of the '875 patent should be dismissed based on collateral estoppel. No. 22-480, D.I. 31 at 2, 5; No. 22-484, D.I. 13 at 2, 5. On November 18, 2021, during a *Markman* hearing in a different case involving Wireless Discovery, Judge Albright held claim 1 of the '875 patent indefinite and, therefore, invalid. *Wireless Discovery LLC v. Bumble Trading Inc.*, No. 6:20-cv-00762, D.I. 43 at 5 (W.D. Tex. Nov. 18, 2021). With respect to claim 1 of the '875 patent, the Court finds Wireless Discovery is collaterally estopped from asserting that claim. A court may consider the preclusive effect of another federal district court judgment on a motion to dismiss under Rule 12(b)(6). *M & M Stone Co. v. Pennsylvania*, 388 F. App'x 156, 162 (3d Cir. 2010). When deciding a Rule 12(b)(6) motion, a court should consider "documents that are attached to or submitted with the complaint, [] and any 'matters incorporated by reference or integral to the claim, items subject to judicial notice, matters of public record, orders, [and] items appearing in the record of the case.'" *Buck v. Hampton Twp. Sch. Dist.*, 452 F.3d 256, 260 (3d Cir. 2006) (citing 5B Charles A. Wright & Arthur R. Miller, Federal Practice & Procedure § 1357 (3d ed. 2004)). "[A] prior judicial opinion constitutes a public record of which a court may take judicial notice." *M & M Stone*, 338 F. App'x at 162.

The Federal Circuit has held that "once the claims of a patent are held invalid in a suit involving one alleged infringer, an unrelated party who is sued for infringement of those claims may reap the benefit of the invalidity decision under the principles of collateral estoppel." *See*

Pharmacia & Upjohn Co. v. Mylan Pharms., Inc., 170 F.3d 1373, 1379 (Fed. Cir. 1999) (quoting *Mendenhall v. Barber–Greene Co.*, 26 F.3d 1573, 1577 (Fed. Cir. 1994)). Defendants eHarmony and The Meet Group "may reap the benefit of [Judge Albright's] invalidity decision under the principles of collateral estoppel." *See Pharmacia*, 170 F.3d at 1379 (quotation omitted). Wireless Discovery provides no substantive arguments why independent claim 1 of the '875 patent should not be dismissed because of collateral estoppel. *See generally* No. 22-480, D.I. 39; No. 22-484, D.I. 23.

The Court will not decide on the merits whether claims 2 through 9 of the '875 patent are collaterally estopped. During the *Markman* hearing, Judge Albright did not determine whether claims 2 through 9 of the '875 patent were indefinite. However, Wireless Discovery stated during oral argument and in its briefing that it no longer asserts claims 1 through 9 of the '875 patent. *See* No. 22-480, D.I. 39 at 3; Tr. 23:22:25. Thus, the Court finds Defendants eHarmony's and The Meet Group's collateral estoppel arguments regarding claims 2 through 9 of the '875 patent unopposed.

For the reasons discussed above, Wireless Discovery is collaterally estopped from asserting claims 1 through 9 of the '875 patent.

b. Attorney Fees Under § 285

In its reply brief, eHarmony also requests the Court to find this case "exceptional" under 35 U.S.C. § 285 and award eHarmony attorney fees. No. 22-480, D.I. 40 at 9-10. The Court finds that eHarmony's request is waived because it was first fully briefed in its reply brief. *See id.* Wireless Discovery also has not had the opportunity to respond to eHarmony's request. Thus, the Court denies eHarmony's request for attorney fees under 35 U.S.C. § 285 without prejudice.

c. Patent Eligible Subject Matter

a. Representativeness

In the eHarmony case, the parties dispute whether certain claims of the asserted patents are representative. *See* No. 22-480, D.I. 31 at 6-14, D.I. 39 at 3-7, D.I. 40 at 2. eHarmony argues that claim 10 of the '875 patent is representative, claim 1 of the '352 patent is representative of claims 2 through 32, claim 1 of the '267 patent is representative of claims 2 through 18, and claim 1 of the '397 patent is representative of claims 2 through 15. No. 22-480, D.I. 31 at 6-14.

Claim 10 of the '875 patent recites a method to match members of a social network in the same vicinity. It states:

> 10. A method comprising:
>
> providing, via a computing device, accessible through any of an internet connection and a mobile telecommunications provider network, access to stored user profile information about a first user using a respective first mobile communications device and a second user, using a respective second mobile communications device;
>
> receiving, via the computing device, indications of the locations of the first and second mobile communications devices;
>
> receiving, via the computing device, a unique device hardware identifier from all communications devices from all users linked in a social network to associate with profiles and authenticate when users sign in to a user account;
>
> sending, via the computing device, to the second mobile communications device, an invitation to accept any of an invitation to connect and personal attribute information from, or share personal attribute information with, the first user, upon receipt of permission from the second user to receive personal attribute information about, or share personal attribute information with, the first user; and
>
> connecting, via the computing device, the first user and the second user through the computing device for personal communication between first user and the second user, the personal communication comprising one or more SMS, E-mail, chat/instant messaging, multimedia, voice or video,

wherein the computing device is configured to locate information about the second user from a social network file of the second user, and transmit this information to the first mobile communications device, and

wherein the first and second users are members of a same social network, and the computing device is operable to disclose social network attributes such as a picture, name, and a location of first and second users in the vicinity or within a particular distance from one another for the purpose of connecting members.

No. 22-480, D.I. 21-5 at claim 10.

Claim 1 of the '352 patent recites a social networking system to match members of a social network in the same vicinity. It states:

1. A system comprising:

a computing device configured to communicate with various mobile and terminal devices to manage introduction and connection of members belonging to a same network by sharing personal attributes between members such as picture(s) and name, wherein said computing device associates unique hardware identification of member devices and login credentials with member profiles and via a search process returns searches of members for others in a vicinity or in proximity thereto, and with personal attributes comprising pictures and names bringing an image of a human face to a device allocation in said search process; and

a first user using a respective first mobile communications device and a second user using a respective second mobile communications device each capable of connecting to the internet through any of a mobile telecommunications provider network and a local area wireless network,

wherein said computing device being in communication with the first and second mobile communication devices through internet connection via an application installed on the respective first and second mobile communication devices of the users, and configured to provide access to stored user profile information about said first user and said second user, respectively, including personal attributes comprising picture(s), a name, information, and a location,

wherein said computing device is configured to store static locations of members and receive information identifying current dynamic locations of all members based on real time location reporting from a client side application,

> wherein said computing device is configured to calculate and determine a proximity of user locations based on any of a static and a dynamic location of the members which are updated on a profile database of said members,
>
> wherein said computing device is configured to send to said first user upon inquiring of other members in the vicinity of said first user, personal attributes of all other members based on proximity calculations to select members that said first user may wish to connect with, and to send to said second mobile communication device an invitation on behalf of said first user and including first user personal attributes for said second user to accept connecting with said first user,
>
> wherein said computing device is configured to connect said first user and said second user through a members-only-social-network communication tools between said first user and said second user, wherein said communication tools comprise any of SMS, E-mail, chat/instant messaging, multimedia, voice, and video, and
>
> wherein said computing device is configured to locate information about said second user from a social network storage file of said second user, and transmit this information to said first mobile communications device for further information beyond first introductory attributes such as picture and name only.

No. 22-480, D.I. 21-3 at claim 1.

Claim 1 of the '267 patent recites a social networking system to match members of a social network in the same vicinity. It states:

1. A system comprising:

> a computing device configured to communicate with various mobile and terminal devices to manage introduction and connection of members belonging to a same network by sharing personal attributes between members;
>
> a first mobile communications device communicatively linked to said computing device; and
>
> a second mobile communications device communicatively linked to said computing device,
>
> wherein said computing device provides access to stored user profile information about a first user and a second user,
>
> wherein said computing device is configured to store static locations of members and receive information identifying current dynamic locations of all members in said network,

wherein said computing device is configured to calculate and determine a proximity of user locations,

wherein said computing device is configured to send to said first user upon inquiring of other members in said network of said first user, personal attributes of all other members based on proximity calculations to select members that said first user may wish to connect with, and to send to said second mobile communication device an invitation on behalf of said first user for said second user to accept connecting with said first user,

wherein said computing device is configured to communicatively connect said first user and said second user,

wherein said computing device is configured to locate information about said second user from a social network storage file of said second user, and transmit this information to said first mobile communications device,

wherein the first user and the second user are members of a same social network, and the computing device is to disclose non-anonymous social network attributes including a picture, name, and location of the first user and the second user in a vicinity or within a predetermined distance from one another for the purpose of connecting members of the same social network based in part on proximity calculations between connecting members,

wherein said computing device permits discoverable members to have their respective devices turned on or turned off at a time of a search being conducted by said first user, wherein said computing device permits said discoverable members to have their respective devices unconnected to an internet connection service at said time of the search being conducted by said first user, and wherein any of turned off devices and disconnected devices is discoverable by said computer device as said internet connection service is configured to report said any of turned off devices and disconnected devices as discoverable based on a latest static and dynamic location in proximity to said first user.

No. 22-480, D.I. 21-6 at claim 1.

Claim 1 of the '397 patent recites a social networking system that matches users in the same vicinity. It states:

1. A server configured to communicate with a first communication device of a first user and a second communication device of a second user over communication links comprising a cellular network, wherein the server comprises a processor configured to:

> store in a data storage device a first profile associated with the first user and a second profile associated with a second user, both the first and the second profile comprises at least a picture and a name of their respective users thereby automatically eliminating anonymous communication of the first profile and the second profile between member devices without intervention by the first user or the second user;
>
> associate each member profile with a unique hardware identification associated with the member devices;
>
> identify a unique ID of a second member in the vicinity and spatial proximity of a first member and provide the first member with the profile of the second member comprising a picture and name to facilitate a connection between both members;
>
> send the second member the profile of the first member including the picture and name upon the first member initiating an invite to the second member to connect over a networking service;
>
> inform the first member if the second member has accepted or rejected the invite to connect initiated by the first member; and
>
> once the second member accepts the invite of the first member, store the connectivity between both members in the data storage device and facilitate a chat feature between them using respective devices connected to the server,
>
> wherein the first user and the second user are members of a same social network, and the processor is to disclose non-anonymous social network attributes including a picture, name, and location of the first user and the second user in a vicinity or within a predetermined distance from one another for the purpose of connecting members of the same social network based in part on proximity calculations between connecting members,
>
> wherein the server permits discoverable members to have their respective devices turned on or turned off at a time of a search being conducted by the first user, wherein the server permits the discoverable members to have their respective devices unconnected to an internet connection service at the time of the search being conducted by the first user, and wherein any of turned off devices and disconnected devices is discoverable by the server as the internet connection service is configured to report the any of turned off devices and disconnected devices as discoverable based on a latest static and dynamic location in proximity to the first user.

No. 22-480, D.I. 21-4 at claim 1.

Wireless Discovery disagrees with eHarmony's representativeness arguments "that one claim of each asserted patent is representative of all claims." No. 22-480, D.I. 39 at 3. Wireless

Discovery, for example, states that claims 11 through 19 of the '875 patent "add additional concrete and technical elements and steps requiring separate patentability analysis." *Id.* However, Wireless Discovery fails to describe *what* additional concrete and technical elements the other claims recite that would require the Court to conduct a separate patentability analysis. In fact, for the other asserted patents, Wireless Discovery simply states, "[t]here are additional examples of differences in the claims of each of the Asserted Patents that for purposes of brevity are not all identified here." *Id.* Wireless Discovery fails to "present any meaningful argument for the distinctive significance of any claim limitations not found in the representative claim." *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1365 (Fed. Cir. 2018) (citations omitted).

For example, Wireless Discovery argued during oral argument that claim 10 of the '875 patent's recitation of a unique device hardware identifier provides a "hardware solution[]." *See* Tr. 27:10-19. The Court, however, is not convinced by Wireless Discovery's arguments that the other claims of the asserted patents have different concrete and technical elements and steps requiring separate patentability analysis. The unique hardware identifier and turning on and off functionality are just generic computing components used for their conventional purpose.

In The Meet Group case, The Meet Group argues that claim 10 of the '875 patent, which is the only asserted patent in that case, is representative. No. 22-484, D.I. 13 at 8-9. Wireless Discovery does not dispute that claim 10 of the '875 patent is representative in its briefing in The Meet Group case. *See generally* No. 22-484, D.I. 20. Thus, eHarmony's and The Meet Group's identification of representative claims control for purposes of determining patent-eligibility under § 101.

b. *Alice* Step 1

The Court must first determine whether the asserted patents are directed toward a patent-ineligible concept. The Court finds the representative claims are directed to the abstract idea of social networking. For example, claim 10 of the '875 patent can be distilled down to the following seven steps: (1) "providing 'user profile information' about two users of 'mobile communications devices,'" (2) "receiving 'indications' of the devices' locations," (3) "receiving 'identifiers' of all devices on a 'social network,'" (4) "sending one user's 'invitation' to exchange information with another user," (5) "connecting users for 'personal communication,'" (6) transmitting information from one user's 'social network file' to the other user's device," and (7) "disclosing 'social network attributes' of users who are 'in the vicinity of or within a particular distance from' each other." No. 22-480, D.I. 31 at 15. Claim 10 of the '875 patent is directed to "the abstract idea of automating the conventional establishment of social networks to allow humans to exchange information and form relationships." *NetSoc, LLC v. Match Grp., LLC*, 838 F. App'x 544, 548 (Fed. Cir. 2020). Courts in this District and other districts have also found claims similar to claim 10 of the '875 patent abstract. In *Jedi Techs., Inc. v. Spark Networks, Inc.*, the court found patents related to the idea "of matching people based on criteria such as personality traits or location" abstract. No. 16-1055-GMS, 2017 WL 3315279, at *7 (D. Del. Aug. 3, 2017). Courts have also found "the basic concept of controlled exchange of information about people as historically practiced by matchmakers and headhunters" to be drawn to an abstract idea and claims directed to "[m]atching based on geographic location" abstract. *Walker Digit., LLC v. Google, Inc.*, 66 F. Supp. 3d 501, 508 (D. Del. 2014) (first quote); *Perry St. Software, Inc. v. Jedi Techs., Inc.*, 548 F. Supp. 3d 418, 433 (S.D.N.Y. 2021) (second quote).

Claim 10 of the '875 patent is no different than these cases. In fact, Wireless Discovery appears to agree that the representative claims of the asserted patents are directed to the abstract idea of social networking. Wireless Discovery states in its brief that "[t]he Claims of the [']875 patent are directed to improvements in exchanging information using mobile communications devices, in particular discovering members of a social network by associating their personal attributes to the mobile communications devices for purposes of exchange." No. 22-480, D.I. 39 at 13.

Claim 10's recitation of data-processing steps does not change the Court's analysis regarding whether the representative claims are directed to an abstract idea. In *NetSoc*, the claims at issue recited additional data-processing steps and the Federal Circuit still found the claims at issue directed to an abstract idea:

> The claim limitations of "maintaining" a list of participants, "presenting" a user with selectable categories, "receiving" the user's category selection, "receiving" an inquiry from the user, "selecting" a participant to receive the user's inquiry, "sending" the inquiry to the participant, "receiving" a response to the inquiry from the participant, "publishing" the response, and "tracking" feedback of the participants . . . are directed to automating a longstanding, well-known method of organizing human activity, similar to concepts previously found to be abstract.

NetSoc, 838 F. App'x at 550.

Similarly, the recitation of data-processing steps, e.g., sending, receiving, and processing data, in claim 10 of the '875 patent do not save the claims from being directed to an abstract idea.

The other representative claims are directed to the abstract idea of social networking. Claim 1 of the '352 patent can be distilled down to the following eight elements: (1) "a server hosting a social network that shares members' name and pictures, associates device identifiers and logins with 'member profiles,' searches based on location, and delivers search results that include 'an image of a human face;'" (2) "users using mobile devices 'capable of connecting to the

internet;'" (3) "an app on each device that allows the users to access social network profiles;" (4) "the server stores the devices' locations;" (5) "the server determines the proximity of two users;" (6) "the server sends one user search results of other nearby members of the social network and sends a second user an invitation;" (7) the server connects the two users 'through a members-only-social-network communication tools [sic] . . . of SMS, E-mail, chat/instant messaging, multimedia, voice, and video;' and (8) the server sends the first user information about the second user." No. 22-480, D.I. 31 at 16. Like claim 10 of the '875 patent, claim 1 of the '352 patent is directed to the abstract idea of automating the conventional establishment of social networks to allow "nearby members of the social network" to exchange information and form relationships. *NetSoc*, 838 F. App'x at 548.

Claim 1 of the '267 patent can be distilled down to the following eleven elements: (1) "a server hosting a social network that shares members' 'personal attributes;'" (2) "a first mobile device;" (3) "a second mobile device;" (4) "the server providing access to users' 'profiles;'" (5) "the server stores user locations;" (6) "the server determines the proximity of users;" (7) "the server sends one user search results of other nearby members of the social network and sends a second user an invitation;" (8) "the server connects the two users;" (9) "the server sends the first user additional information about the second user;" (10) "the 'first user and the second user are members of a same social network' and the server discloses social network profile information to each other to allow the users to connect;" and (11) "the server allows users to connect even if one is offline based on the latest location." No. 22-480, D.I. 31 at 17. Like claim 10 of the '875 patent and claim 1 of the '352 patent, claim 1 of the '267 patent is directed to the idea of automating the conventional establishment of social networks to allow "nearby members of the social network" to exchange information and form relationships. *NetSoc*, 838 F. App'x at 548.

Finally, claim 1 of the '397 patent can be distilled down to the following eight steps: (1) "storing user profiles;" (2) "associating each profile with a 'hardware identification' of each social network member's device;" (3) "identifying an 'ID' of a member nearby another member and displaying the profile information 'to facilitate a connection';" (4) "'initiating an invite . . . to connect over a networking service' and sharing the profile information of the member who initiated the invitation;" (5) "informing whether the 'invite' is 'accepted or rejected';" (6) "storing the 'connectivity' between the members and facilitating 'a chat feature';" (7) "the members 'are members of a same social network' and disclosing profile information of nearby members 'for the purpose of connecting members of the same social network';" and (8) "the server allows members to connect even if one is offline." No. 22-480, D.I. 31 at 17-18. Like the other representative asserted claims, claim 1 of the '397 patent is directed to the abstract idea of social networking.

Wireless Discovery also argued during oral argument that the asserted patents are not directed to an abstract idea because they are directed to a telecommunications network. *See, e.g.*, Tr. 36:1-7; 37:8-11. According to Wireless Discovery, the asserted patents add additional "hardware solutions" to allow communications between mobile devices. *See* Tr. 27:10-19. Thus, Wireless Discovery concludes that the claims of the asserted patents "are directed toward specific means and methods that improve relevant technologies." Tr. 31:1-6 (citing *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1313 (Fed. Cir. 2016)).

The Court disagrees with Wireless Discovery's argument that the claims are not directed to an abstract idea. In *McRO*, the Federal Circuit held the invention recited "specific rules" or algorithms for a computer to "achieve an improved technological result," i.e., to produce "accurate and realistic lip synchronization and facial expression in animated characters." *McRO*, 837 F.3d at 1313-16. In the instant action, none of the representative clams recite any specific rules or

algorithms to improve a telecommunications network. Rather, the claims recite purely functional steps related to the abstract idea of exchanging information about people based on their location and membership in an organization.

For the above reasons, the Court finds the representative asserted claims are directed to the abstract idea of social networking. The Court must now proceed to *Alice* step two.

c. *Alice* Step 2

In *Alice* step two, the Court considers the elements of the claim, both individually and as an ordered combination, to assess whether "the limitations present in the claims represent a patent-eligible application of the abstract idea." *Content Extraction & Transmission LLC v. Wells Fargo Bank*, 776 F.3d 1343, 1347 (Fed. Cir. 2014) (citation omitted). Merely reciting the use of a generic computer or adding the words "apply it with a computer" cannot convert a patent-ineligible abstract idea into a patent-eligible invention. *Alice*, 573 U.S. at 223; *Versata Dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1332 (Fed. Cir. 2015). "To save a patent at step two, an inventive concept must be evident in the claims." *RecogniCorp, LLC v. Nintendo Co.*, 855 F.3d 1322, 1327 (Fed. Cir. 2017) (citation omitted).

The Court finds no saving inventive concept in any of the representative asserted claims. The asserted patents describe a social network system that uses "available technology and standard protocols available today," including a "standard cell phone," a "cellular phone network," "existing standard Bluetooth technology," and "Wi-Fi." No. 22-480, D.I. 21-5 at 2:31, 2:43-44, 2:50, 4:17-20, 11:45-46. Nothing in the representative asserted claims require anything other than "off-the-shelf, conventional computer, network, and display technology for gathering, sending, and presenting the desired information." *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350,

1355 (Fed. Cir. 2016). In other words, the representative asserted claims "mere[ly] recit[es] a generic computer," which is not an inventive concept that could "transform a patent-ineligible abstract idea into a patent-eligible invention." *Alice*, 573 U.S. at 223. The representative asserted claims in this action fail to add "a technological improvement to the computer or otherwise provide 'something more' to 'transform' the claims. *NetSoc*, 838 F. App'x at 549 (citing *Alice*, 573 U.S. at 217).

Wireless Discovery makes several conclusionary statements that the asserted patents recite an inventive concept. *See generally* No. 22-480, D.I. 39; No. 22-484, D.I. 20. For example, Wireless Discovery states that the inventive concept of the '267 patent is "easily exchanging contact and/or personal information over the internet for purposes of social interaction by way of mobile devices without limitations to hardware brands." No. 22-480, D.I. 39 at 4. However, Wireless Discovery's alleged inventive concepts are merely rephrasing the abstract idea and saying it is an inventive concept, which is improper. *Trading Techs. Int'l, Inc. v. IBM LLC*, 921 F.3d 1084, 1093 (Fed. Cir. 2019) ("[t]he abstract idea itself cannot supply the invention concept, 'no matter how groundbreaking the advance.'" (internal citations omitted)).

Moreover, "[a] claim that recites an abstract idea must include 'additional features' to ensure 'that the [claim] is more than a drafting effort designed to monopolize the [abstract idea].' Those 'additional features' must be more than 'well-understood, routine, conventional activity.'" *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715 (Fed. Cir. 2014) (citations omitted). Wireless Discovery fails to show how the alleged inventive concepts are more than well-understood, routine, or conventional. Tellingly, Wireless Discovery only cites to the specification in its brief, not to the claims, to support its bare assertions that the asserted patents recite an inventive concept. *See generally* No. 22-480, D.I. 39; No. 22-484, D.I. 20. Wireless Discovery's analysis is flawed

because its conclusory statements about the asserted patents' inventive concepts are untethered to the claim language of the asserted patents. *See ChargePoint, Inc. v. SemaConnect, Inc.*, 920 F.3d 759, 769 (Fed. Cir. 2019) ("The § 101 inquiry must focus on the language of the Asserted Claims themselves, and the specification cannot be used to import details from the specification if those details are not claimed." (internal citations and quotation marks omitted)); *see also American Axle & Mfg., Inc. v. Neapco Holdings LLC*, 967 F.3d 1285, 1293 (Fed. Cir. 2020) ("[F]eatures that are not claimed are irrelevant as to step 1 or step 2 of the Mayo/Alice analysis").

Wireless Discovery also argued during oral argument that the asserted patents recite interactions that create a social network that is "manipulated to yield the desired result, allowing connection of devices without requiring hardware compatibility, a result that overrides any consideration that this is a routine and conventional sequence of events ordinarily encountered in forming a social network." Tr. 40:5-11. The Court disagrees and finds the computer components recited in the claims are used for their conventional purposes. The representative asserted claims recite "establishing a social network on a computer," which "are quintessential 'apply it with a computer' claims." *NetSoc*, 838 F. App'x. 544 at 548-49 (citation omitted).

For the above reasons, the Court finds no inventive concept that transforms the representative claims into a patent-eligible application of the abstract idea. Thus, the Court finds by clear and convincing evidence that the representative claims fail *Alice* step 2 and the '875, '362, '267, and '397 patents are invalid under § 101.

d. Wireless Discovery's Request for Leave to Amend

Wireless Discovery also requests leave to amend its complaint "if the Court believes the teachings and citations from the patents-in-suit should be incorporated into the complaint." *See*

No. 22-480, D.I. 39 at 20; *see also* No. 22-484, D.I. 20 at 15. When deciding a Rule 12(b)(6) motion, a court considers "documents that are attached to or submitted with the complaint." *Buck v. Hampton Twp. Sch. Dist.*, 452 F.3d 256, 260 (3d Cir. 2006) (citation omitted). Wireless Discovery attached to its complaint the asserted patents. No. 22-480, D.I. 21-3, D.I. 21-4, D.I. 21-5, D.I. 21-6; No. 22-484, D.I. 1-3. The Court reviewed those patents when deciding the pending Motions to Dismiss. The claims of the patents say what they say. Amending the complaint would not change the Court's § 101 analysis. Thus, Wireless Discovery's amendments would be futile, and the Court denies Wireless Discovery's request.

IV. CONCLUSION

Therefore, at Wilmington this 6th day of February 2023, **IT IS HEREBY ORDERED** that The Meet Group's Motion to Dismiss for Failure to State a Claim (No. 22-484, D.I. 12) is **GRANTED** and eHarmony's Motion to Dismiss for Failure to State a Claim (No. 22-480, D.I. 30) is **DENIED-IN-PART** and **GRANTED-IN-PART**.

GREGORY B. WILLIAMS
UNITED STATES DISTRICT JUDGE

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

WIRELESS DISCOVERY LLC, Plaintiff, v. COFFEE MEETS BAGEL, INC., Defendant.	C.A. No. 22-478-GBW
WIRELESS DISCOVERY LLC, Plaintiff, v. DOWN APP, INC., Defendant.	C.A. No. 22-479-GBW
WIRELESS DISCOVERY LLC, Plaintiff, v. GRINDR, INC., Defendant.	C.A. No. 22-481-GBW
WIRELESS DISCOVERY LLC, Plaintiff, v. HILY CORP., Defendant.	C.A. No. 22-482-GBW

MEMORANDUM ORDER

Presently before this Court is Defendant Coffee Meets Bagel, Inc.'s ("Coffee Meets Bagel"), Defendant Down App, Inc.'s ("Down App"), Defendant Grindr, Inc.'s ("Grindr"), and Defendant Hily, Corp.'s ("Hily") (collectively, "Defendants") Motions to Dismiss for Failure to State a Claim under Federal Rule of Civil Procedure 12(b)(6) (the "Motion"). C.A. No. 22-478, D.I. 24; C.A. No. 22-479, D.I. 25; C.A. No. 22-481, D.I. 27; C.A. No. 22-482, D.I. 25.[1] The Court has reviewed the parties' briefing, D.I. 25, D.I. 30, D.I. 36,[2] and heard oral argument on December 14, 2022.[3] ("Tr. __"). For the reasons below, the Court GRANTS Defendants' Motion.

I. BACKGROUND

On April 13, 2022, Plaintiff Wireless Discovery LLC ("Wireless Discovery") sued Defendants in separate patent infringement cases asserting infringement of U.S. Patent No. 9,264,875 ("the '875 patent"). D.I. 1. Wireless Discovery amended its complaint on July 18, 2022, asserting three additional patents: U.S. Patent Nos. 9,357,352 (the "'352 patent"), 10,321,267 (the "'267 patent"), and 10,334,397 (the "'397 patent"). D.I. 17; No. 22-479, D.I. 18; No. 22-481, D.I. 20; No. 22-482, D.I. 19.

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[1] All docket entries are citations to Civil Docket No. 22-478, unless otherwise indicated.

[2] The parties also filed letter briefs identifying which U.S. Supreme Court or Federal Circuit case(s) they contend is most similar to the patent(s)-at issue. D.I. 42, D.I. 43.

[3] The Court also heard oral argument on Defendant eHarmony, Inc.'s and Defendant The Meet Group, Inc.'s Motion to Dismiss in *Wireless Discovery LLC v. eHarmony, Inc.*, No. 22-480 and *Wireless Discovery LLC v. The Meet Group, Inc.*, No. 22-484. C.A. No. 22-480, D.I. 30; C.A. No. 22-484, D.I. 12. The Court issued a similar but separate opinion in those cases. The Court similarly finds in those cases that the asserted patents are not patent eligible under 35 U.S.C. § 101. The Court also granted Defendant eHarmony, Inc.'s and Defendant The Meet Group, Inc.'s Motions to Dismiss claims 1 through 9 of the '875 patent based on collateral estoppel.

The asserted patents are all from the same patent family and are continuations-in-part of U.S. Patent No. 8,914,024, which is not asserted in any of these cases. *See* D.I. 25 at 3. The asserted patents all relate generally to the idea of social networking, i.e., discovering members of the same social network in the same vicinity and exchanging member's personal information. *See* D.I. 17-5 at 1:16-22 ("The invention relates to discovering members of a social network by associating their personal attributes to the mobile device for the purpose of exchanging information using mobile communication devices and, in particular, exchanging personal information between one or more mobile communication devices.").

Individuals can "use their mobile phones to discover others by personal attributes, such as by photos and names, after which, the two parties can exchange information over the internet." *Id.* at 2:4-7. These individuals can discover other members who are located "within a vicinity." *Id.* at 4:4-6. The "vicinity" is determined by a location that was reported to the server, in the geographic area specified by a user's "search criteria," or by a location recorded in a database. *Id.* at 5:4-15.

Individuals can send "invitations" to other members in the vicinity. *Id.* at 5:14-22. "The invitation may take the form of a social card, VCard, or other manner of engaging another person in a social atmosphere, or even a business setting such as a meeting, trade show, conference, etc." *Id.* at 5:18-22. If a user accepts the "invitation," "members can elect to exchange or send personalized, intimate contact information over the internet after the users have discovered each other." *Id.* at 4:10-12. The invention "provides a system and method that enables free discovery of others who also desire social interaction, but without being constrained by hardware compatibility issues inherent in mobile devices by different manufacturers." *Id.* at 2:20-24.

II. LEGAL STANDARD

a. Motion to Dismiss Under Rule 12(b)(6)

To state a claim on which relief can be granted, a complaint must contain "a short and plain statement of the claim showing that the pleader is entitled to relief . . . ." Fed. R. Civ. P. 8(a)(2). Such a claim must plausibly suggest "facts sufficient to 'draw the reasonable inference that the defendant is liable for the misconduct alleged.'" *Doe v. Princeton Univ.*, 30 F.4th 335, 342 (3d Cir. 2022) (quoting *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009)) (citing *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 557 (2007)). "A claim is facially plausible 'when the plaintiff pleads factual content that allows the court to draw the reasonable inference that the defendant is liable for the misconduct alleged.'" *Klotz v. Celentano Stadtmauer & Walentowicz LLP*, 991 F.3d 458, 462 (3d Cir. 2021) (quoting *Iqbal*, 556 U.S. at 678). But the Court will "'disregard legal conclusions and recitals of the elements of a cause of action supported by mere conclusory statements.'" *Princeton Univ.*, 30 F.4th at 342 (quoting *Davis v. Wells Fargo*, 824 F.3d 333, 341 (3d Cir. 2016)). Under Rule 12(b)(6), the Court must accept as true all factual allegations in the Complaint and view those facts in the light most favorable to the plaintiff. *See Fed. Trade Comm'n v. AbbVie Inc*, 976 F.3d 327, 351 (3d Cir. 2020).

b. Patent Eligible Subject Matter

Patentability under 35 U.S.C. § 101 is a threshold legal issue. *Bilski v. Kappos*, 561 U.S. 593, 602 (2010). Section 101 inquiry is properly raised at the pleading stage if it is apparent from the face of the patent that the asserted claims are not directed to eligible subject matter. *Cleveland Clinic Found. v. True Health Diagnostics LLC*, 859 F.3d 1352, 1360 (Fed. Cir. 2017), *cert. denied*, 138 S. Ct. 2621 (2018); *see also SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1166 (Fed. Cir. 2018) (stating that patent eligibility "may be, and frequently has been, resolved on a Rule 12(b)(6)

or (c) motion"); *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1097 (Fed. Cir. 2016) (stating that "it is possible and proper to determine patent eligibility under 35 U.S.C. § 101 on a Rule 12(b)(6) motion" (quoting *Genetic Techs. Ltd. v. Merial L.L.C.*, 818 F.3d 1369, 1373–74 (Fed. Cir. 2016))); *Voter Verified, Inc. v. Election Sys. & Software LLC*, 887 F.3d 1376, 1379 (Fed. Cir. 2018) (affirming Rule 12(b)(6) dismissal based on § 101 patent ineligibility). This is, however, appropriate "only when there are no factual allegations that, taken as true, prevent resolving the eligibility question as a matter of law." *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1128 (Fed. Cir. 2018).

Section 101 of the Patent Act defines patent-eligible subject matter. It states, "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title." 35 U.S.C. § 101. The Supreme Court has held that there are exceptions to § 101. "Laws of nature, natural phenomena, and abstract ideas are not patentable." *Alice Corp. Pty. v. CLS Bank Int'l*, 573 U.S. 208, 216 (2014) (internal quotation marks and citation omitted). "[I]n applying the § 101 exception, [the court] must distinguish between patents that claim the 'building blocks' of human ingenuity and those that integrate the building blocks into something more[] thereby 'transforming' them into a patent-eligible invention. The former 'would risk disproportionately tying up the use of the underlying' ideas, and are therefore ineligible for patent protection. The latter pose no comparable risk of pre-emption, and therefore remain eligible for the monopoly granted under our patent laws." *Id.* at 217 (cleaned up).

The Supreme Court's *Alice* decision established a two-step framework for determining patent-eligibility under § 101. In the first step, the court must determine whether the claims at issue are directed to a patent ineligible concept. *Id.* In other words, are the claims directed to a

law of nature, natural phenomenon, or abstract idea? *Id.* If the answer to the question is "no," then the patent is not invalid for teaching ineligible subject matter under § 101. If the answer to the question is "yes," then the court proceeds to step two, where it considers "the elements of each claim both individually and as an ordered combination" to determine if there is an "inventive concept—i.e., an element or combination of elements that is sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself." *Id.* at 217-18 (alteration in original). "A claim that recites an abstract idea must include 'additional features' to ensure that the [claim] is more than a drafting effort designed to monopolize the [abstract idea]." *Id.* at 221 (internal quotation marks and citation omitted). Further, "the prohibition against patenting abstract ideas cannot be circumvented by attempting to limit the use of [the idea] to a particular technological environment." *Id.* at 222 (quoting *Bilski*, 561 U.S. at 610–11). Thus, "the mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention." *Id.* at 223. "The question of whether a claim element or combination of elements is well-understood, routine and conventional to a skilled artisan in the relevant field," which underlies the second step of *Alice*, "is a question of fact. Any fact, such as this one, that is pertinent to the invalidity conclusion must be proven by clear and convincing evidence." *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1368 (Fed. Cir. 2018).

III. DISCUSSION

a. Representativeness

The parties dispute whether certain claims of the asserted patents are representative. *See* D.I. 25 at 6-8, D.I. 30 at 3-4, D.I. 36 at 2-3. Defendants argue that claim 10 of the '267 patent is representative of the other claims in the asserted patents, because all the claims contain the "same essential elements." D.I. 25 at 6. Claim 10 of the '267 patent recites:

10. A method comprising:

using a computing device to communicate with various mobile and terminal devices to manage introduction and connection of members belonging to a same network by sharing personal attributes between members;

communicatively linking a first mobile communications device to said computing device; communicatively linking a second mobile communications device to said computing device;

using said computing device to provide access to stored user profile information about a first user and a second user;

using said computing device to store static locations of members and receive information identifying current dynamic locations of all members in said network;

using said computing device to calculate and determine a proximity of user locations;

using said computing device to send to said first user upon inquiring of other members in said network of said first user, personal attributes of all other members based on proximity calculations to select members that said first user may wish to connect with, and to send to said second mobile communication device an invitation on behalf of said first user for said second user to accept connecting with said first user;

using said computing device to communicatively connect said first user and said second user;

using said computing device to locate information about said second user from a social network storage file of said second user, and transmit this information to said first mobile communications device, wherein the first user and the second user are members of a same social network, and the computing device is to disclose non-anonymous social network attributes including a picture, name, and location of the first user and the second user in a vicinity or within a predetermined distance from one another for the purpose of connecting members of the same social network based in part on proximity calculations between connecting members;

using said computing device to permit discoverable members to have their respective devices turned on or turned off at a time of a search being conducted by said first user; and

using said computing device to permit said discoverable members to have their respective devices unconnected to an internet connection service at said time of the search being conducted by said first user,

> wherein any of turned off devices and disconnected devices is discoverable by said computer device as said internet connection service is configured to report said any of turned off devices and disconnected devices as discoverable based on a latest static and dynamic location in proximity to said first user.

D.I. 17-6 at claim 10.

Claim 10 of the '267 patent can be distilled down to the following seven steps: "(1) 'linking' mobile devices to a computer, (2) accessing user profiles and membership, (3) using user location, (4) determining user proximity, (5) exchanging 'personal attributes' of users and invitations to connect, [] (6) connecting members for communication, [and] (7) allowing offline connecting." D.I. 25 at 6 (citing D.I. 17-6 at claim 10). The other asserted patents are "substantially similar." *Content Extraction and Transmission LLC v. Wells Fargo Bank*, 776 F.3d 1343, 1348 (Fed. Cir. 2014) (citation omitted); *see also* D.I. 36 at 2-3. In fact, in Wireless Discovery's opposition brief, it states that the asserted patents are directed to nearly verbatim ideas. *Compare* D.I. 30 at 7 ("The Claims of the [']875 patent are directed to improvements in exchanging information using mobile communications devices, in particular discovering members of a social network by associating their personal attributes to the mobile communications devices for purposes of exchange") *with id.* at 11 ("The Claims of the [']267 patent are directed to improvements in exchanging information using mobile communications devices, in particular discovering personal attributes for purposes of exchange.").

Defendants argue that there are also no meaningful differences "that would make [c]laim 10 of the '267 [p]atent anything other than 'substantially similar' to the other asserted claims." D.I. 36 at 2 (citation omitted). Defendants note that independent claim 1 of the '267 patent is a system claim version of claim 10 of the '267 patent and recites the "same core concept." D.I. 25 at 6. The other claims of the '267 patents merely recite "generic components used for their conventional purpose." *Id.* Defendants also argue that claim 10 of the '267 patent "is

representative of the other Asserted Patents because the claims of all the Asserted Patents rely on these same essential steps with only slight variations based on other generic components used for their conventional purpose." *Id.*; *see also id.* at 7-8.

Wireless Discovery disagrees and argues that the other claims have "different concrete and technical elements and steps requiring separate patentability analysis." D.I. 30 at 3. For example, Wireless Discovery argues that claim 10 of the '875 patent "requires a unique device hardware identifier which is not a feature of the [']267 [p]atent claims." *Id.*[4] During oral argument, Wireless

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[4] Claim 10 of the '875 patent recites:

> 10. A method comprising:
>
> providing, via a computing device, accessible through any of an internet connection and a mobile telecommunications provider network, access to stored user profile information about a first user using a respective first mobile communications device and a second user, using a respective second mobile communications device;
>
> receiving, via the computing device, indications of the locations of the first and second mobile communications devices;
>
> receiving, via the computing device, a unique device hardware identifier from all communications devices from all users linked in a social network to associate with profiles and authenticate when users sign in to a user account;
>
> sending, via the computing device, to the second mobile communications device, an invitation to accept any of an invitation to connect and personal attribute information from, or share personal attribute information with, the first user, upon receipt of permission from the second user to receive personal attribute information about, or share personal attribute information with, the first user; and
>
> connecting, via the computing device, the first user and the second user through the computing device for personal communication between first user and the second user, the personal communication comprising one or more SMS, E-mail, chat/instant messaging, multimedia, voice or video,
>
> wherein the computing device is configured to locate information about the second user from a social network file of the second user, and transmit this information to the first mobile communications device, and

Discovery argued that claim 10 of the '875 patent's recitation of a unique device hardware identifier provides a "hardware solution[]." *See* Tr. 27:10-19. Wireless Discovery also notes that claim 1 of the '267 patent "requires a computing device that permits discoverable members to have their respective devices turned on or off," which is not recited in claim 10 of the '875 patent. D.I. 30 at 3.

For the other asserted patents, Wireless Discovery states, "[t]here are additional examples of differences in the claims of each of the Asserted Patents that for purposes of brevity are not all identified here, but can be seen in the attached Exhibit I." *Id.* Exhibit I is a table that lists one independent claim from each of the asserted patents. *See generally* D.I. 30-2. Even with the attachment of Exhibit I, Wireless Discovery fails to describe *what* additional concrete and technical elements the other claims recite that would require the Court to conduct a separate patentability analysis. Wireless Discovery fails to "present any meaningful argument for the distinctive significance of any claim limitations not found in the representative claim." *Berkheimer*, 881 F.3d at 1365 (citations omitted).

The Court is not convinced by Wireless Discovery's arguments that the other claims of the asserted patents have different concrete and technical elements and steps requiring separate patentability analysis. The unique hardware identifier and turning on and off functionality are just generic components used for their conventional purpose. Wireless Discovery also has not proven that there are meaningful differences between claim 10 of the '267 patent and any claim of the

---

> wherein the first and second users are members of a same social network, and the computing device is operable to disclose social network attributes such as a picture, name, and a location of first and second users in the vicinity or within a particular distance from one another for the purpose of connecting members.

D.I. 17-5 at claim 10.

asserted patents. Thus, the Court finds claim 10 of the '267 patent is representative of all claims, because it is substantially similar and directed to the same idea as the other claims in the asserted patents.

b. *Alice* Step 1

The Court must first determine whether the asserted patents are directed toward a patent-ineligible concept. The Court finds claim 10 of the '267 patent is directed to the abstract idea of social networking, such as matching people by their location. Defendants include the below table in their briefs, which summarizes how claim 10 of the '267 patent is directed to an abstract idea.

Claim Language	Claimed Idea
10. A method comprising:	
using a computing device to communicate with various mobile and terminal devices to manage introduction and connection of members belonging to a same network by sharing personal attributes between members;	Linking mobile devices
communicatively linking a first mobile communications device to said computing device; communicatively linking a second mobile communications device to said computing device;	Linking mobile devices
using said computing device to provide access to stored user profile information about a first user and a second user;	Accessing membership data
using said computing device to store static locations of members and receive information identifying current dynamic locations of all members in said network;	Using user location
using said computing device to calculate and determine a proximity of user locations;	Determining user proximity
using said computing device to send to said first user upon inquiring of other members in said network of said first user, personal attributes of all other members based on proximity calculations to select members that said first user may wish to connect with, and to send to said second mobile communication	Exchanging member information and sending invitations to connect

device an invitation on behalf of said first user for said second user to accept connecting with said first user;	
using said computing device to communicatively connect said first user and said second user;	Exchanging member information
using said computing device to locate information about said second user from a social network storage file of said second user, and transmit this information to said first mobile communications device, wherein the first user and the second user are members of a same social network, and the computing device is to disclose non-anonymous social network attributes including a picture, name, and location of the first user and the second user in a vicinity or within a predetermined distance from one another for the purpose of connecting members of the same social network based in part on proximity calculations between connecting members;	Connecting members for communication
using said computing device to permit discoverable members to have their respective devices turned on or turned off at a time of a search being conducted by said first user; and	Allowing offline connecting
using said computing device to permit said discoverable members to have their respective devices unconnected to an internet connection service at said time of the search being conducted by said first user,	Allowing offline connecting
wherein any of turned off devices and disconnected devices is discoverable by said computer device as said internet connection service is configured to report said any of turned off devices and disconnected devices as discoverable based on a latest static and dynamic location in proximity to said first user.	Allowing offline connecting

D.I. 25 at 9-10.

As evidenced above, claim 10 of the '267 patent is directed to the abstract idea of "simply exchanging information about people based on their location and membership in an organization." D.I. 25 at 10. In other words, claim 10 of the '267 patent is directed to "the abstract idea of

automating the conventional establishment of social networks to allow humans to exchange information and form relationships." *NetSoc, LLC v. Match Grp., LLC*, 838 F. App'x 544, 548 (Fed. Cir. 2020). Courts in this District and other districts have also found claims similar to claim 10 of the '267 patent abstract. In *Jedi Technologies, Inc. v. Spark Networks, Inc.*, the court found patents related to the idea of "matching people based on criteria such as personality traits or location" abstract. No. 16-1055-GMS, 2017 WL 3315279, at *7 (D. Del. Aug. 3, 2017). Courts have also found "the basic concept of controlled exchange of information about people as historically practiced by matchmakers and headhunters" to be drawn to an abstract idea and claims directed to "[m]atching based on geographic location" abstract. *See Walker Digit., LLC v. Google, Inc.*, 66 F. Supp. 3d 501, 508 (D. Del. 2014) (first quote); *Perry St. Software, Inc. v. Jedi Techs., Inc.*, 548 F. Supp. 3d 418, 433 (S.D.N.Y. 2021) (second quote).

Claim 10 of the '267 patent is no different than these cases. One of the objectives of the '267 patent is to provide a method to "communicate with various mobile and terminal devices to manage introduction and connection of members belonging to a same network by sharing personal attributes between members." D.I. 17-6 at 2:42-45; *see also* D.I. 17-5 at 2:4-7 ("a method that allows individuals to use their mobile phones to discover others by personal attributes …[and] exchange information over the internet").

Wireless Discovery argued during oral argument that the asserted patents are not directed to an abstract idea because they are directed to telecommunications network. *See, e.g.*, Tr. 36:1-7; 37:8-11. According to Wireless Discovery, the asserted patents add additional "hardware solutions" to allow communications between mobile devices. *See* Tr. 27:10-19. Thus, Wireless Discovery concludes that the claims of the asserted patents "are directed toward specific means

and methods that improve relevant technologies." Tr. 31:1-6 (citing *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1313 (Fed. Cir. 2016)).

The Court disagrees with Wireless Discovery's argument that the claims are not directed to an abstract idea. In *McRO*, the Federal Circuit held the invention recited "specific rules" or algorithms for a computer to "achieve an improved technological result," i.e., to produce "'accurate and realistic lip synchronization and facial expression in animated characters.'" *McRO*, 837 F.3d at 1313-16 (citation omitted). Claim 10 of the '267 patent does not recite any specific rules or algorithms to improve telecommunications network, nor does claim 10 of the '267 patent improve specific computer technology or solve specific computer problems. *See, e.g.*, *Ancora Techs. v. HTC Am., Inc.*, 908 F.3d 1343, 1348 (Fed. Cir. 2018) (finding asserted patent directed to improving security against a computer's unauthorized use of a program non-abstract because the asserted patent improved computer functionality and was "done by a specific technique that departs from earlier approaches to solve a specific computer problem."). Claim 10 of the '267 patent does not describe a specific technique that departs from earlier approaches to solve a specific computer problem. The claims recite purely functional steps related to the abstract idea of exchanging information about people based on their location and membership in an organization.

For the above reasons, the Court finds claim 10 of the '267 patent directed to the abstract idea of social networking. The Court must now proceed to *Alice* step two.

c. *Alice* Step 2

In *Alice* step two, the Court considers the elements of the claim, both individually and as an ordered combination, to assess whether "the limitations present in the claims represent a patent-eligible application of the abstract idea." *Content Extraction*, 776 F.3d at 1347 (citation omitted). Merely reciting the use of a generic computer or adding the words "apply it with a computer"

cannot convert a patent-ineligible abstract idea into a patent-eligible invention. *Alice*, 573 U.S. at 223; *Versata Dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1332 (Fed. Cir. 2015). "To save a patent at step two, an inventive concept must be evident in the claims." *RecogniCorp, LLC v. Nintendo Co.*, 855 F.3d 1322, 1327 (Fed. Cir. 2017) (citation omitted).

The Court finds no saving inventive concept in claim 10 of the '267 patent. The asserted patents describe a social network system that uses "available technology and standard protocols available today," including "a standard cell phone," a "cellular phone network," "existing standard Bluetooth technology," and "Wi-Fi." D.I. 17-5 at 2:31, 2:43-44, 2:50, 4:17-20, 11:45-46. Nothing in claim 10 of the '267 patent requires anything other than "off-the-shelf, conventional computer, network, and display technology for gathering, sending, and presenting the desired information." *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1355 (Fed. Cir. 2016). Claim 10 of the '267 patent recites the use of generic components such as "a computing device," "network," and "mobile communications device." D.I. 17-6 at claim 10. The specification of the '267 patent also states that the invention can be implemented on conventional servers. *Id.* at 5:67-6:11 ("In certain embodiments, communication between the member's mobile devices and the server goes through a BTS 403, and communicates according to a packet-based telecommunications protocol such as GPS, 3G, 4G, LTE or any alternative data technology. In FIG. 1, communication links to/from mobile devices 400 and a network-based server 401 are provided; e.g., internet server, over a BTS 403 using standard communication protocols that provide separate facilities for transmission of digital data, or through wireless connection 404 capable of connecting the user to the internet."). Claim 10 of the '267 patent "mere[ly] recit[es] a generic computer," which is not an inventive concept that could "transform a patent-ineligible abstract idea into a patent-eligible invention." *Alice*, 573 U.S. at 223. Claim 10 of the '267 patent fails to add "a technological improvement to

the computer or otherwise provide 'something more' to 'transform' the claims." *NetSoc*, 838 F. App'x at 549 (citing *Alice*, 573 U.S. at 217).

Wireless Discovery makes several conclusionary statements that the asserted patents recite an inventive concept. *See* D.I. 30 at 4-7. Wireless Discovery states that the inventive concept of the '267 patent is "easily exchanging contact and/or personal information over the internet for purposes of social interaction by way of mobile devices without limitations to hardware brands." D.I. 30 at 4. Wireless Discovery's alleged inventive concepts are merely rephrasing the abstract idea and saying it is an inventive concept, which is improper. *Trading Techs. Int'l, Inc. v. IBM LLC*, 921 F.3d 1084, 1093 (Fed. Cir. 2019) ("[t]he abstract idea itself cannot supply the invention concept, 'no matter how groundbreaking the advance.'" (internal citations omitted)).

Additionally, "[a] claim that recites an abstract idea must include 'additional features' to ensure 'that the [claim] is more than a drafting effort designed to monopolize the [abstract idea].' Those 'additional features' must be more than 'well-understood, routine, conventional activity.'" *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715 (Fed. Cir. 2014) (citations omitted). Wireless Discovery fails to show how the alleged inventive concepts are more than well-understood, routine, or conventional. Tellingly, Wireless Discovery only cites to the specification in its brief, not to the claims, to support its bare assertions that the asserted patents recite an inventive concept. *See* D.I. 30 at 4-7. Wireless Discovery's analysis is flawed because its conclusory statements about the asserted patents' inventive concepts are untethered to the claim language of the asserted patents. *See ChargePoint, Inc. v. SemaConnect, Inc.*, 920 F.3d 759, 769 (Fed. Cir. 2019) ("The § 101 inquiry must focus on the language of the Asserted Claims themselves, and the specification cannot be used to import details from the specification if those details are not claimed." (internal citations and quotation marks omitted)); *see also American Axle & Mfg., Inc. v. Neapco Holdings*

LLC, 967 F.3d 1285, 1293 (Fed. Cir. 2020) ("[F]eatures that are not claimed are irrelevant as to step 1 or step 2 of the Mayo/Alice analysis").

Wireless Discovery also argued during oral argument that the asserted patents recite interactions that create a social network that is "manipulated to yield the desired result, allowing connection of devices without requiring hardware compatibility, a result that overrides any consideration that this is a routine and conventional sequence of events ordinarily encountered in forming a social network." Tr. 40:5-11. The Court disagrees and finds the computer components recited in the claims are used for their conventional purposes. Claim 10 of the '267 patent recites "establishing a social network on a computer," which are "are quintessential 'apply it with a computer' claims." *NetSoc*, 838 F. App'x. 544 at 548-49 (citation omitted).

For the above reasons, the Court finds no inventive concept that transforms claim 10 of the '267 patent into a patent-eligible application of the abstract idea. Thus, the Court finds by clear and convincing evidence that claim 10 of the '267 patent fails *Alice* step 2 and the '875, '362, '267, and '397 patents are invalid under § 101.

d. Wireless Discovery's Request for Leave to Amend

Wireless Discovery also requests leave to amend its complaint "if the Court believes the teachings and citations from the patents-in-suit should be incorporated into the complaint." *See* D.I. 30 at 19. When deciding a 12(b)(6) motion, a court considers "documents that are attached to or submitted with the complaint." *Buck v. Hampton Twp. Sch. Dist.*, 452 F.3d 256, 260 (3d Cir. 2006) (citation omitted). Wireless Discovery attached to its complaint the asserted patents. D.I. 17-3, D.I. 17-4, D.I. 17-5, D.I. 17-6. The Court reviewed those patents when deciding the pending Motion. The claims of the patents say what they say. Amending the complaint would not change

the Court's § 101 analysis. Thus, Wireless Discovery's amendments would be futile, and the Court denies Wireless Discovery's request.

IV. CONCLUSION

Therefore, at Wilmington this 6th day of February 2023, **IT IS HEREBY ORDERED** that Defendants' Motion (No. 22-478, D.I. 24; No. 22-479, D.I. 25; No. 22-481, D.I. 27; No. 22-482, D.I. 25) is **GRANTED**.

GREGORY B. WILLIAMS
UNITED STATES DISTRICT JUDGE

(12) **United States Patent**
Alharayeri

(10) **Patent No.: US 9,264,875 B2**
(45) **Date of Patent: *Feb. 16, 2016**

(54) **LOCATION-BASED DISCOVERY OF NETWORK MEMBERS BY PERSONAL ATTRIBUTES FOR ALTERNATE CHANNEL COMMUNICATION**

(71) Applicant: **XIMOXI, INC.**, Los Gatos, CA (US)

(72) Inventor: **Ramzi Alharayeri**, San Jose, CA (US)

(73) Assignee: **WIRELESS DISCOVERY LLC**, Los Gatos, CA (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

(21) Appl. No.: **14/570,779**

(22) Filed: **Dec. 15, 2014**

(65) **Prior Publication Data**

US 2015/0099550 A1 Apr. 9, 2015

Related U.S. Application Data

(63) Continuation-in-part of application No. 12/351,654, filed on Jan. 9, 2009, now Pat. No. 8,914,024.

(60) Provisional application No. 61/010,891, filed on Jan. 10, 2008.

(51) **Int. Cl.**
H04W 24/00 (2009.01)
H04W 4/20 (2009.01)
(Continued)

(52) **U.S. Cl.**
CPC ***H04W 4/206*** (2013.01); ***H04L 51/00*** (2013.01); ***H04L 51/32*** (2013.01); ***H04L 65/00*** (2013.01);
(Continued)

(58) **Field of Classification Search**
CPC H04W 4/02; H04L 29/08657
USPC 455/41.2, 412.2, 414.1, 426.1, 432.3, 455/434, 456.3
See application file for complete search history.

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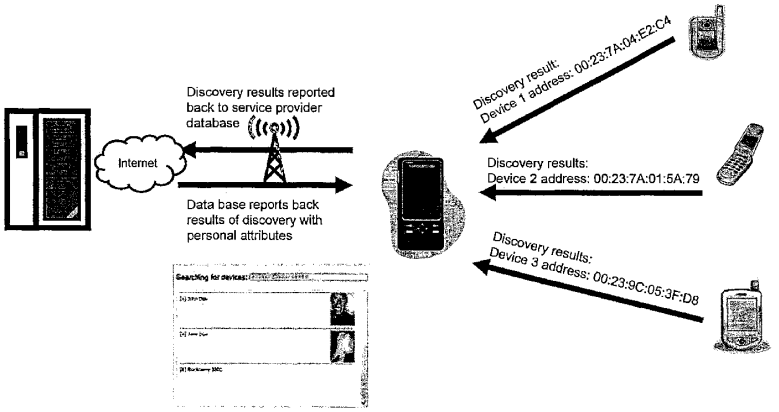
Primary Examiner — Christopher M Brandt
Assistant Examiner — Matthew Genack
(74) *Attorney, Agent, or Firm* — Rahman LLC

(57) **ABSTRACT**

User mobile devices are equipped to discover each other through an ad hoc network, based on their location and proximity or based on mobile network reporting to one another. Locations may be reported through global positioning methods and cross-referenced by other users. Following discovery and consent, the mobile devices are connected to one another via various means, other than the ad hoc network, and utilize functions provided by services such as SMS, E-mail, chat/instant messaging, multimedia, or video. The users may be members of a common social network, and can thereby exchange social network attributes.

20 Claims, 15 Drawing Sheets



(51) **Int. Cl.**

H04L 29/08	(2006.01)
H04L 12/58	(2006.01)
H04L 29/06	(2006.01)
H04W 4/02	(2009.01)
H04W 76/00	(2009.01)
H04W 84/18	(2009.01)
H04L 29/12	(2006.01)

(52) **U.S. Cl.**

CPC ***H04L 67/28*** (2013.01); ***H04L 67/306*** (2013.01); ***H04W 4/023*** (2013.01); ***H04W 76/00*** (2013.01); *H04L 51/38* (2013.01); *H04L 61/1594* (2013.01); *H04W 84/18* (2013.01)

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FIG. 1

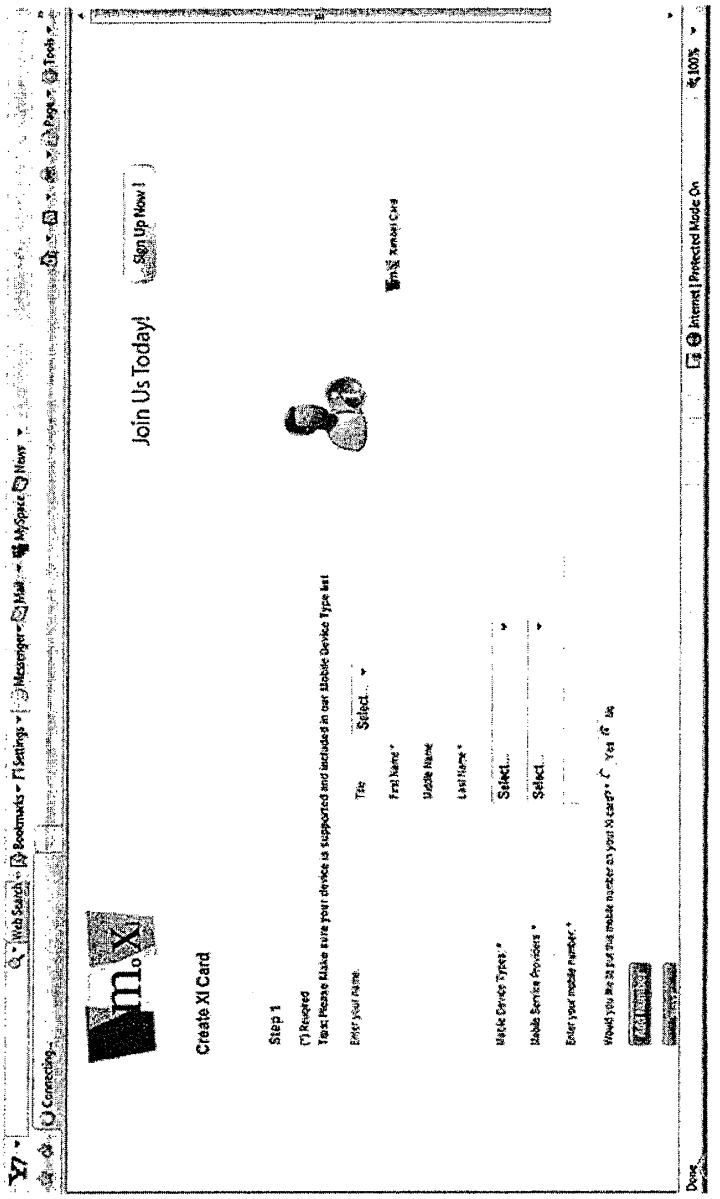

Join Us Today!
Sign Up Now !
Create XI Card
Step 1
Title
Select...
First Name *
Middle Name
Last Name *
Mobile Service Types *
Mobile Service Providers *
Enter your mobile number. *
Internet | Protected Mode: On
100%

FIG. 2

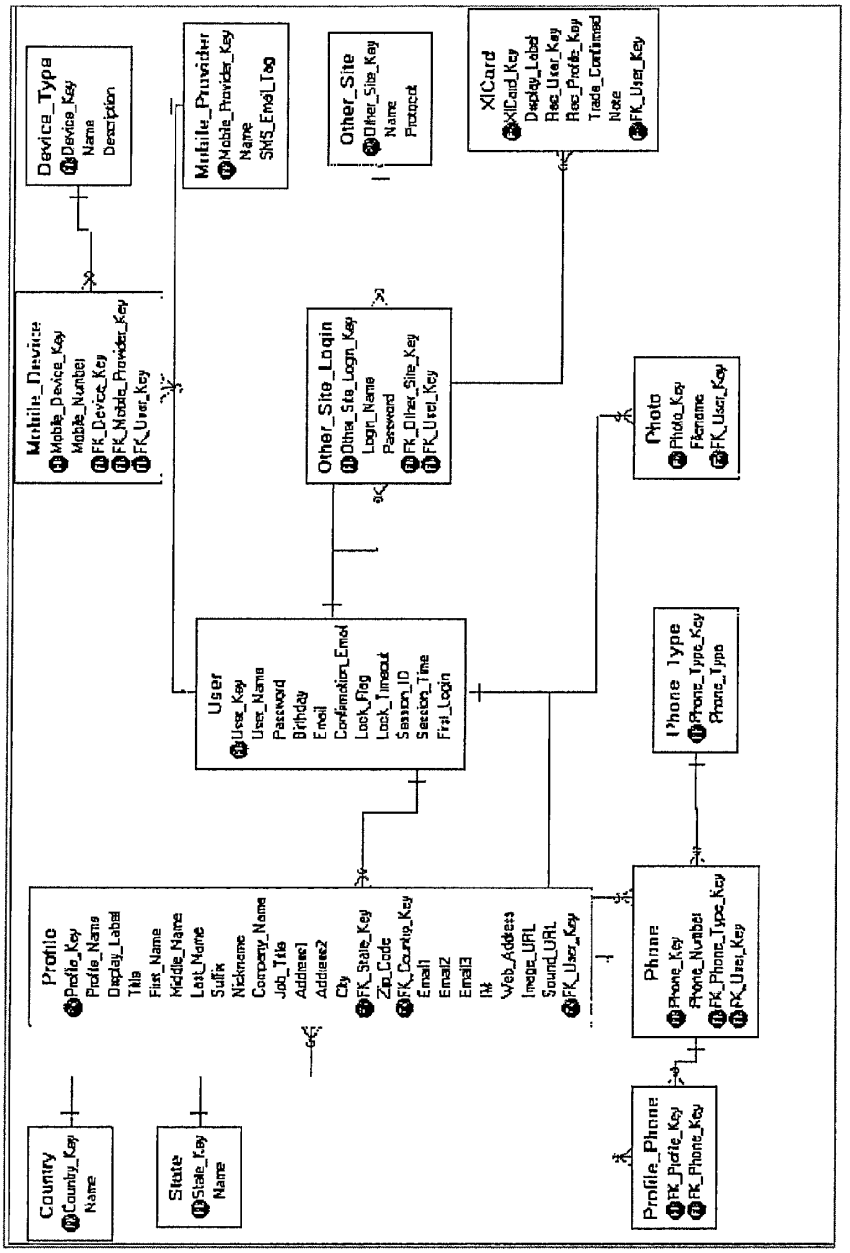
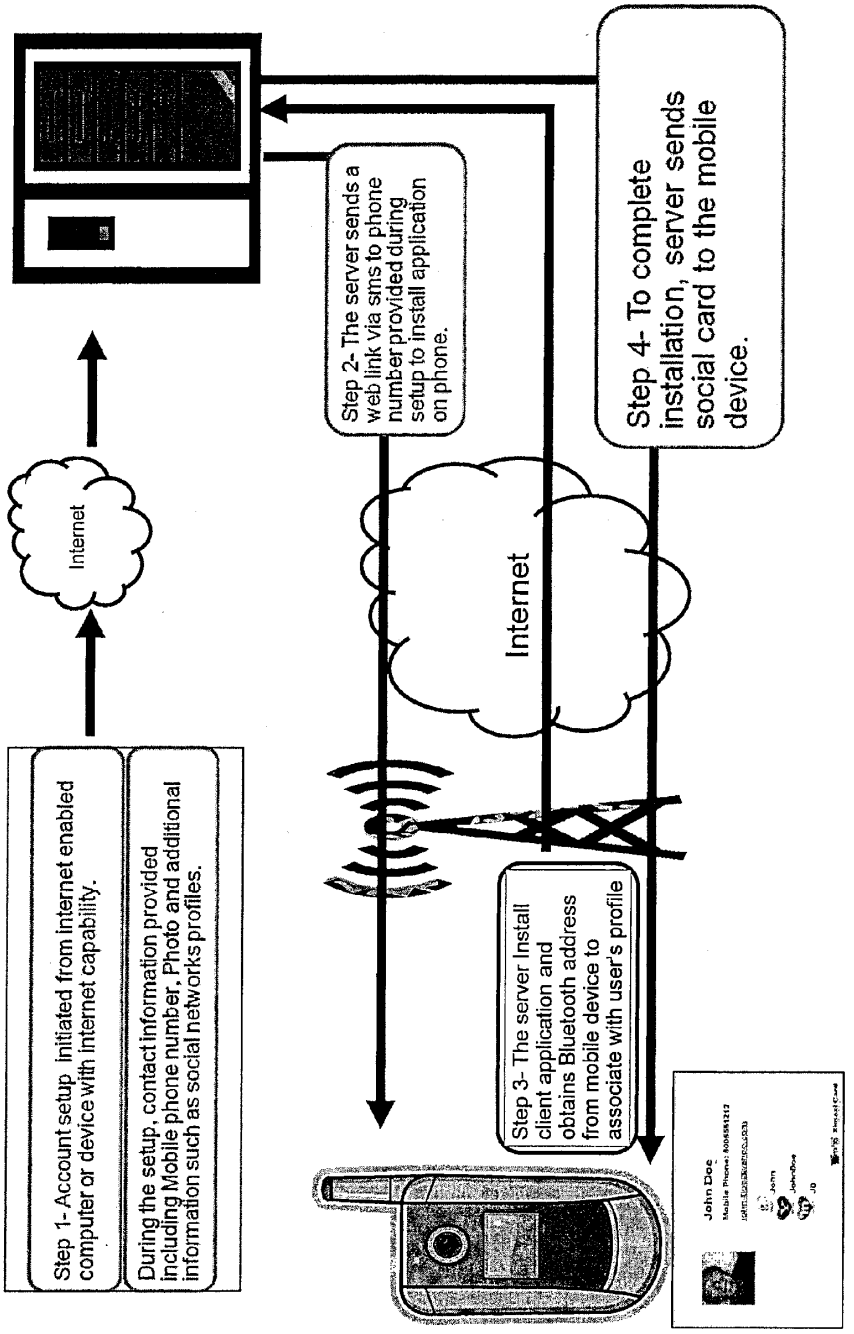

Device_Type
Device_Key
Name
Description
Mobile_Provider
Mobile_Provider_Key
Name
SMS_Email_Tag
Other_Site
Other_Site_Key
Name
Protocol
XICard
XICard_Key
Display_Label
Rec_User_Key
Rec_Profile_Key
Trade_Confirmed
Note
FK_User_Key
Mobile_Device
Mobile_Device_Key
Mobile_Number
FK_Device_Key
FK_Mobile_Provider_Key
FK_User_Key
Other_Site_Login
Othsi_Sta_Logn_Key
Login_Name
Password
FK_Other_Site_Key
FK_User_Key
Photo
Photo_Key
Filename
FK_User_Key
User
User_Key
User_Name
Password
Birthday
Email
Confirmation_Emai
Lock_Flag
Lock_Timeout
Session_ID
Session_Time
First_Login
Phone_Type
Phone_Type_Key
Phone_Type
Profile
Profile_Key
Profile_Name
Display_Label
Title
First_Name
Middle_Name
Last_Name
Suffix
Nickname
Company_Name
Job_Title
Address1
Address2
City
FK_State_Key
Zip_Code
FK_Country_Key
Email1
Email2
Email3
Ink
Web_Address
Image_URL
Sound_URL
FK_User_Key
Phone
Phone_Key
Phone_Number
FK_Phone_Type_Key
FK_User_Key
Country
Country_Key
Name
State
State_Key
Name
Profile_Phone
FK_Profile_Key
FK_Phone_Key

FIG. 3


Step 1- Account setup initiated from internet enabled computer or device with internet capability.
During the setup, contact information provided including Mobile phone number, Photo and additional information such as social networks profiles.
Internet
Step 2- The server sends a web link via sms to phone number provided during setup to install application on phone.
Step 3- The server Install client application and obtains Bluetooth address from mobile device to associate with user's profile
Internet
Step 4- To complete installation, server sends social card to the mobile device.
John Doe

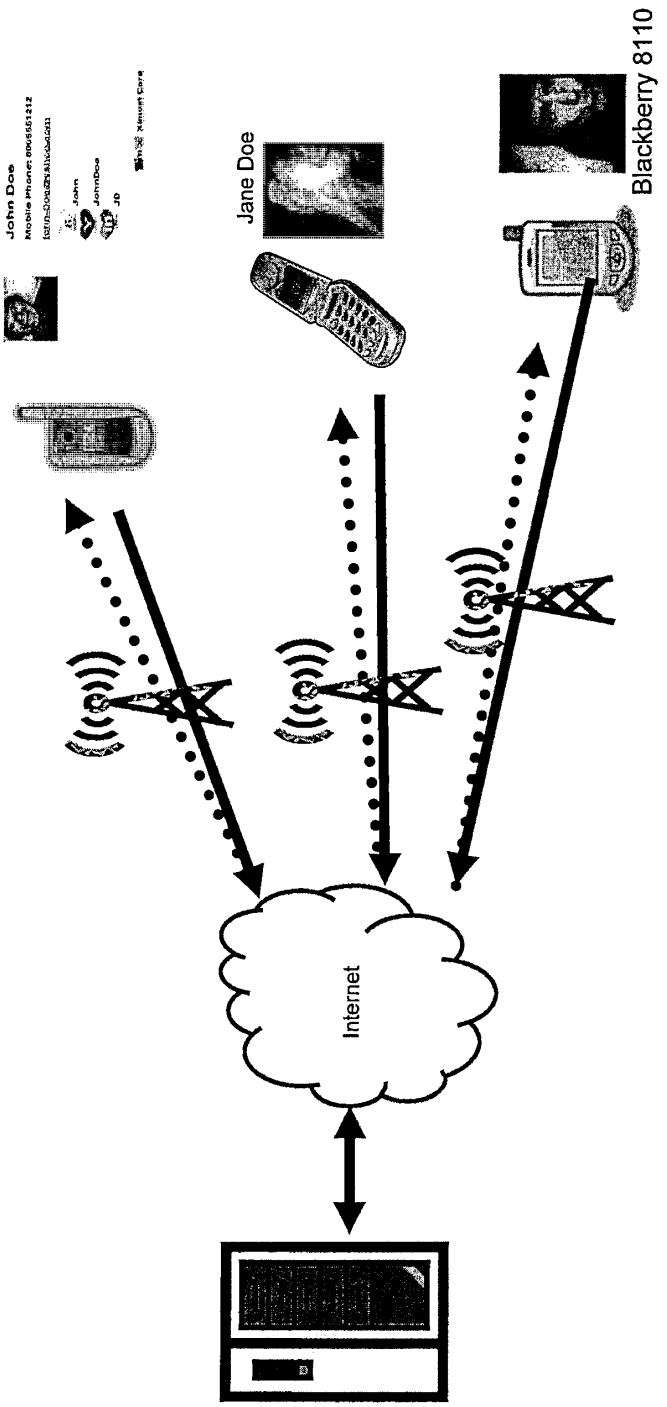


FIG. 4

FIG. 5

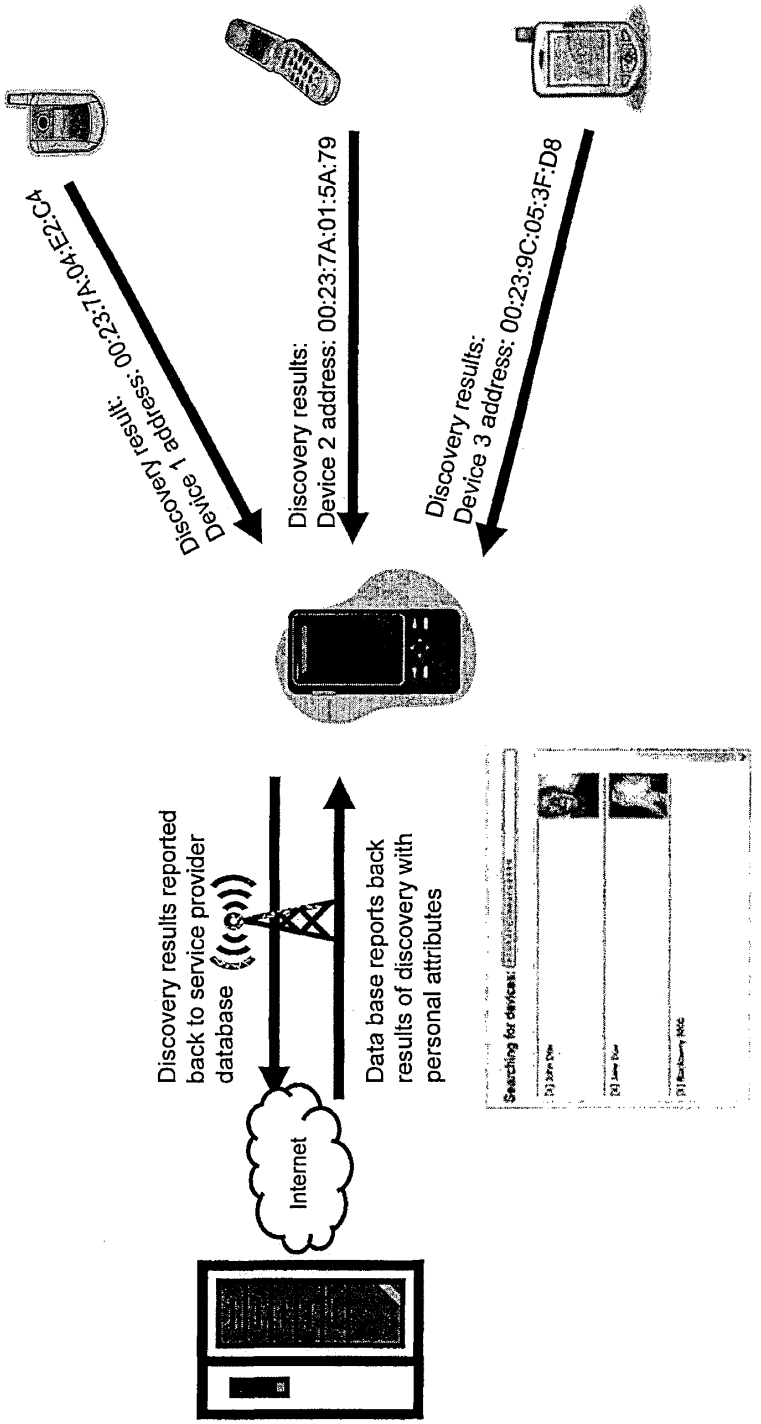

Discovery result: Device 1 address: 00:23:7A:04:E2:C4
Discovery results: Device 2 address: 00:23:7A:01:5A:79
Discovery results: Device 3 address: 00:23:9C:05:3F:D8
Discovery results reported back to service provider database
Data base reports back results of discovery with personal attributes
Internet

FIG. 6

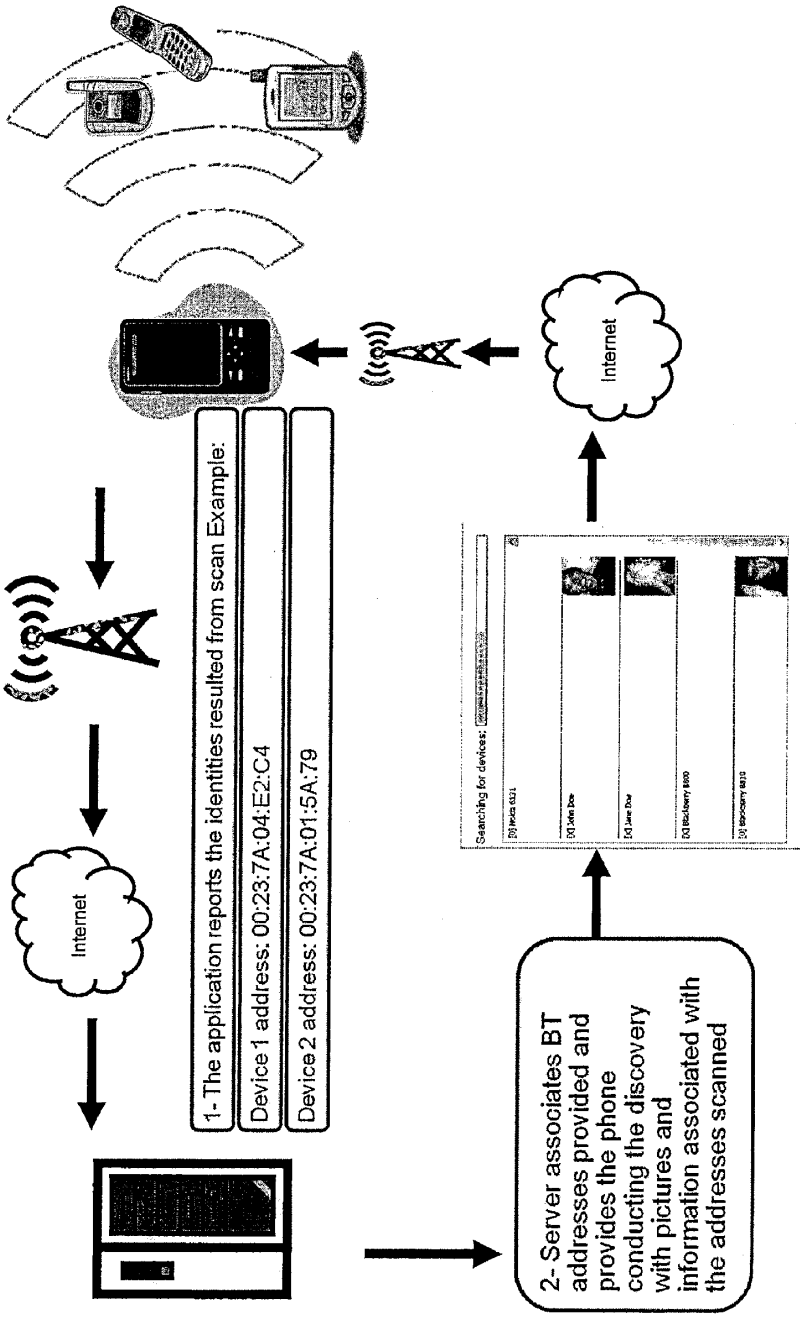

Internet
Internet
1- The application reports the identities resulted from scan Example:
Device 1 address: 00:23:7A:04:E2:C4
Device 2 address: 00:23:7A:01:5A:79
2- Server associates BT addresses provided and provides the phone conducting the discovery with pictures and information associated with the addresses scanned

FIG. 7

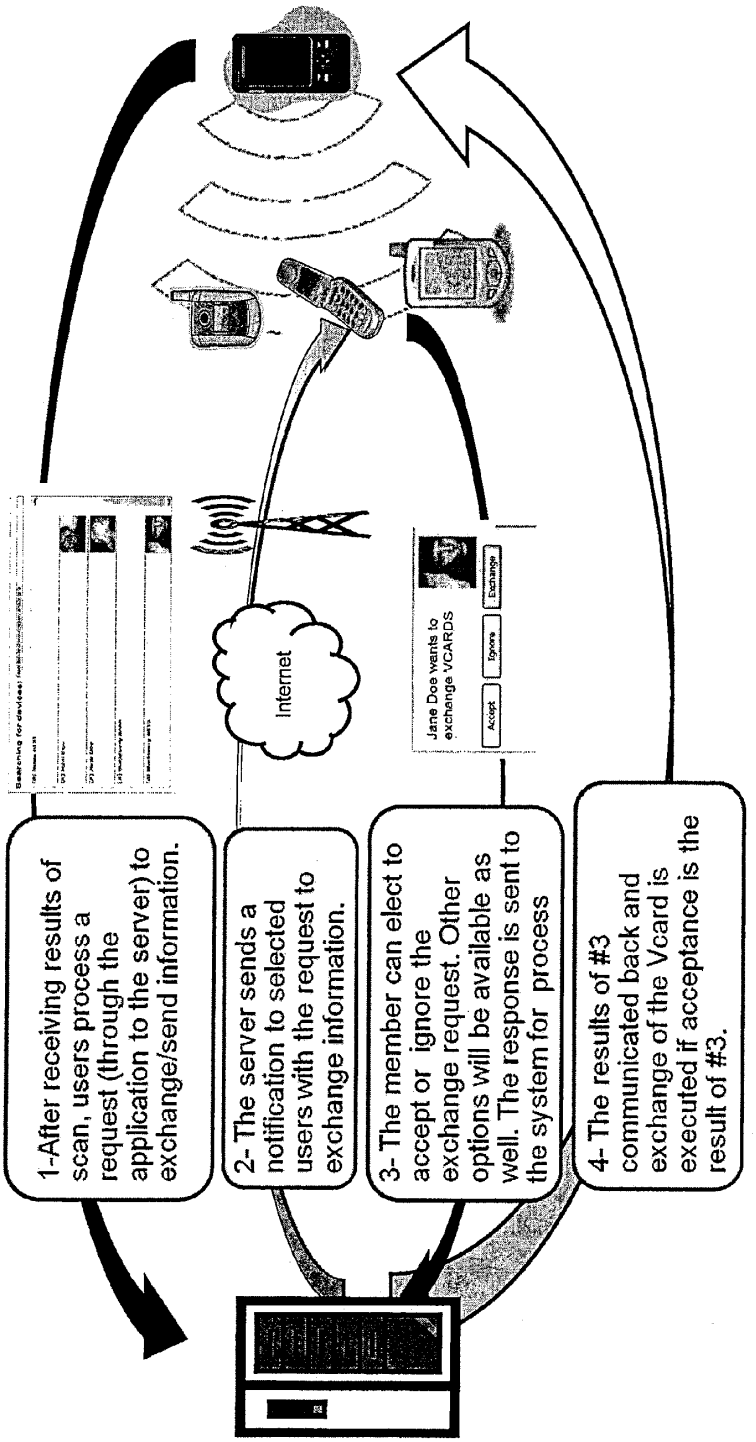
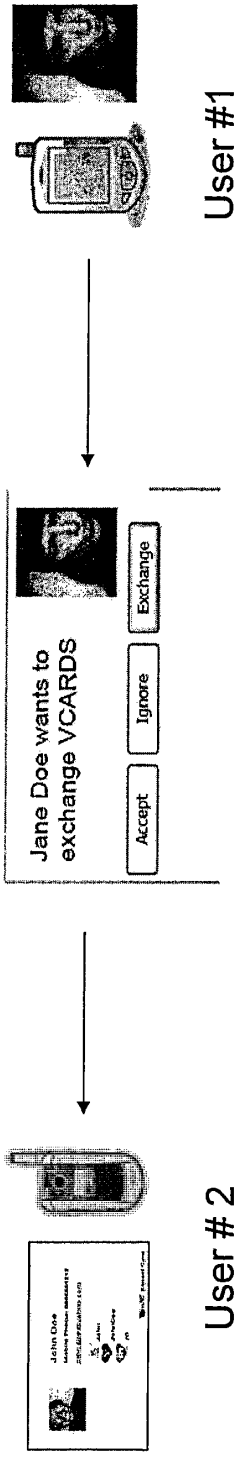

Internet
Jane Doe wants to exchange VCARDS
Accept
Ignore
Exchange
1-After receiving results of scan, users process a request (through the application to the server) to exchange/send information.
2- The server sends a notification to selected users with the request to exchange information.
3- The member can elect to accept or ignore the exchange request. Other options will be available as well. The response is sent to the system for process
4- The results of #3 communicated back and exchange of the Vcard is executed if acceptance is the result of #3.

FIG. 8



Users have the option of Accepting, ignoring or exchanging contact information.
-Accept means that the member elects to receive only the other user's information
- Ignore is a rejection to the invitation.
-- Exchange means receiving user #1 information and in return, send user #2 information.

Other option to be available will include Broadcasting which is a blast of a user's personal card to all members in the vicinity through the same process.

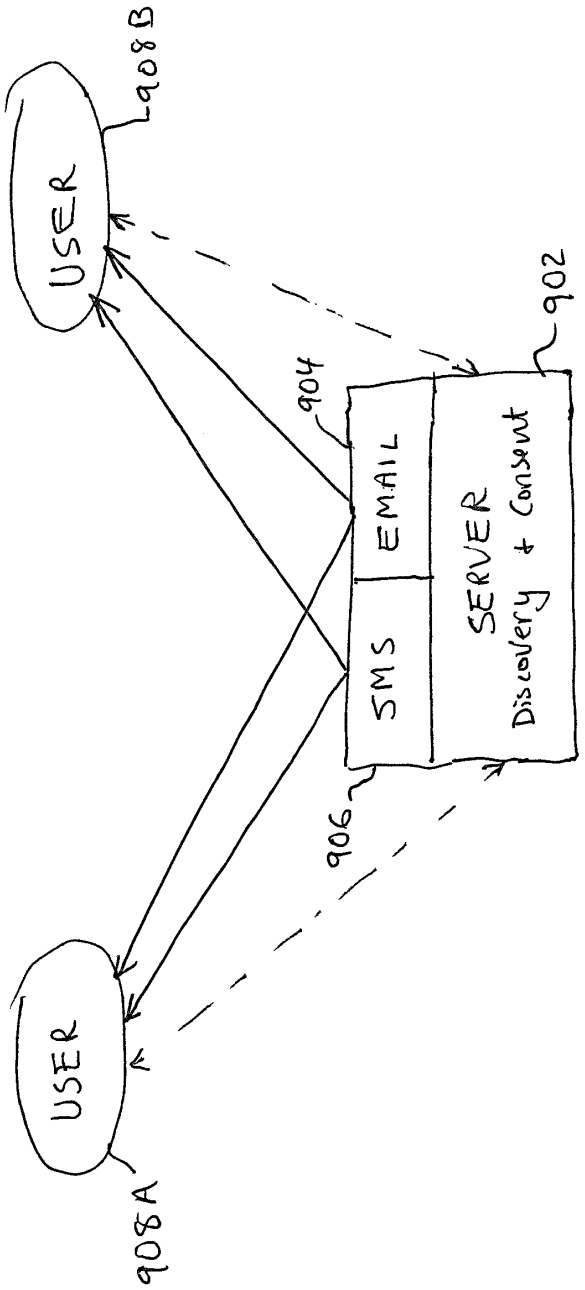

USER
908B
902
904
EMAIL
SMS
SERVER
Discovery + Consent
906
USER
908A

FIG. 9

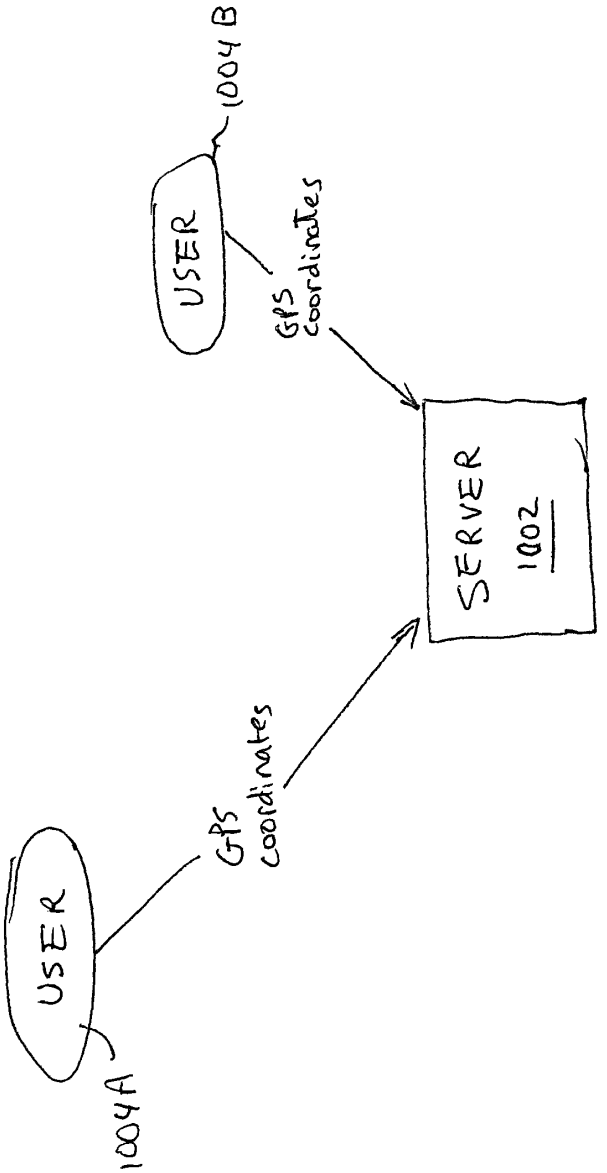

USER
1004B
GPS coordinates
SERVER
1002
GPS coordinates
USER
1004A

FIG. 10

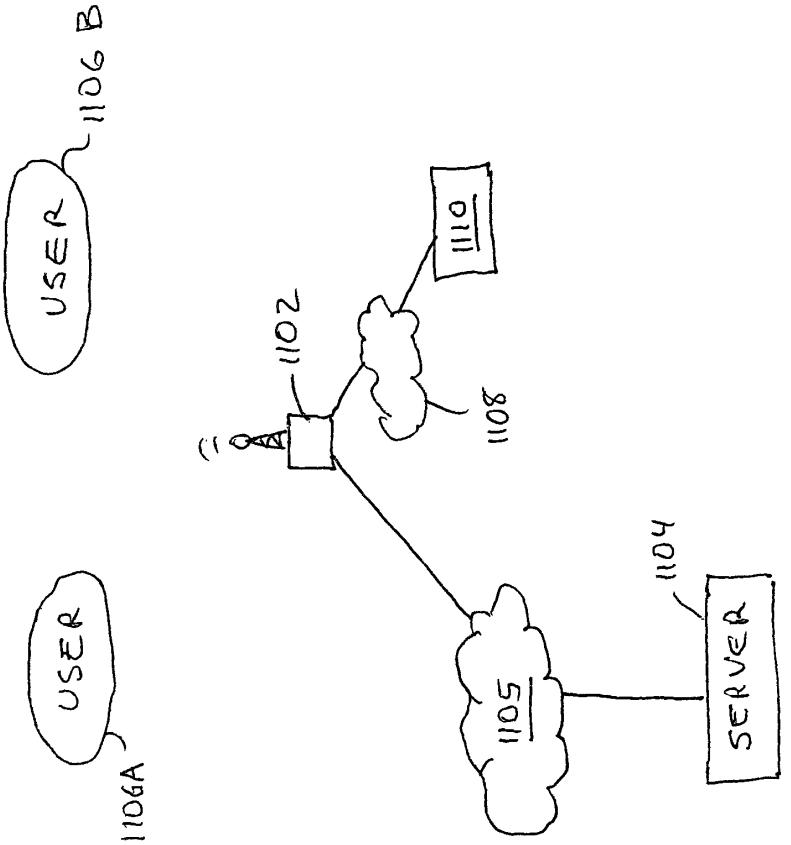


FIG. 11

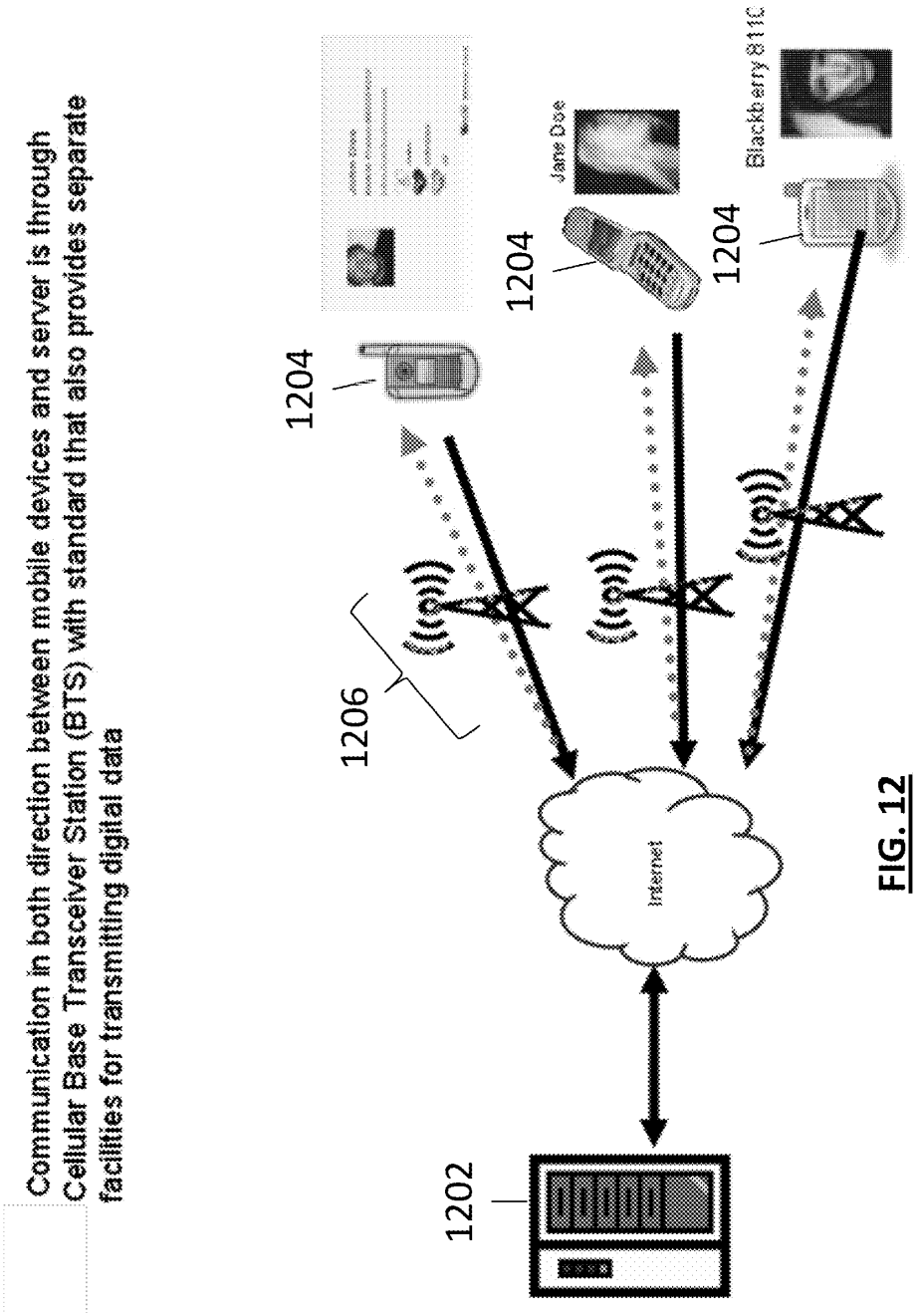

Communication in both direction between mobile devices and server is through Cellular Base Transceiver Station (BTS) with standard that also provides separate facilities for transmitting digital data
1204
1204
1204
1206
1202
Internet
Jane Doe
Blackberry 811C

FIG. 12

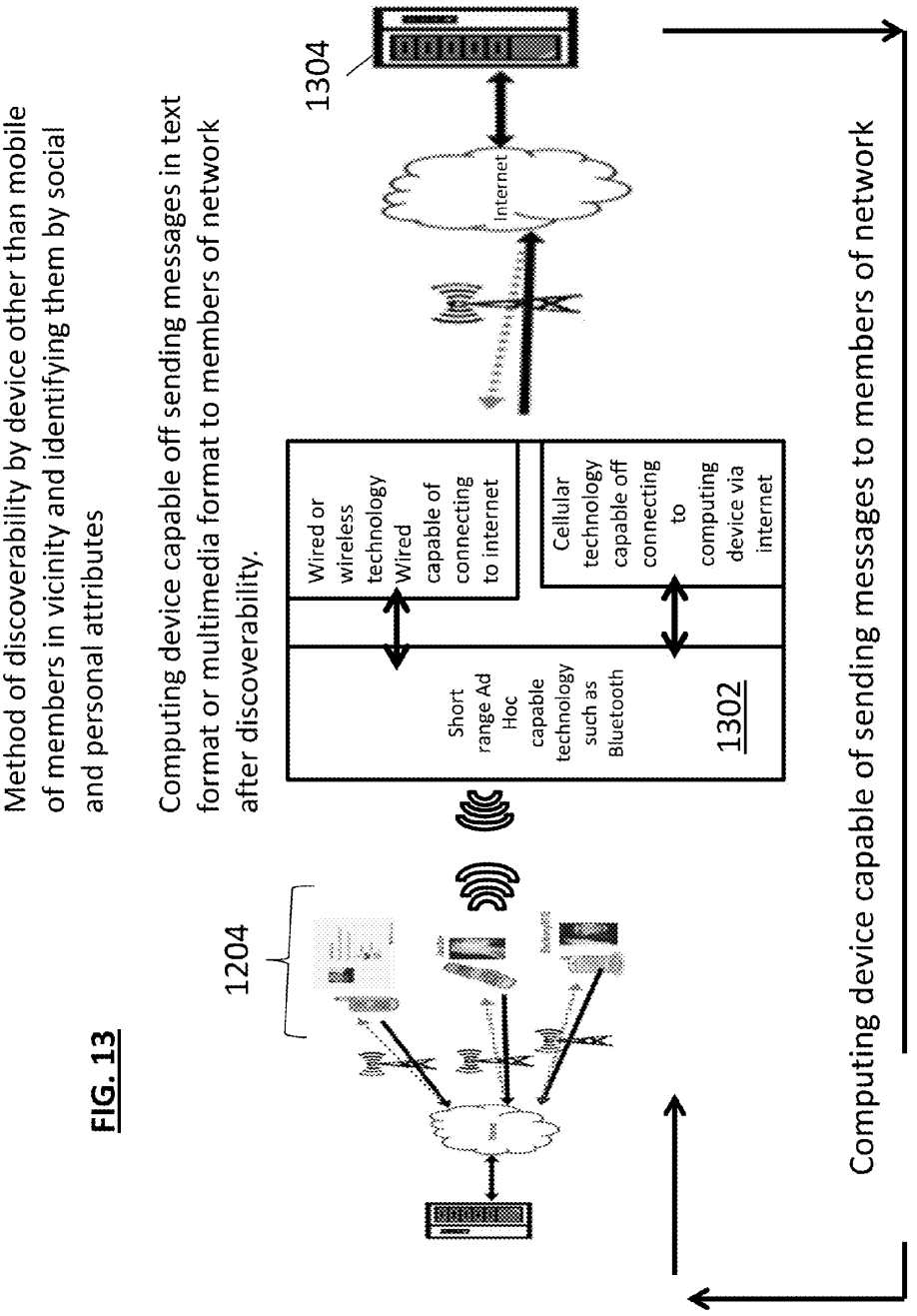
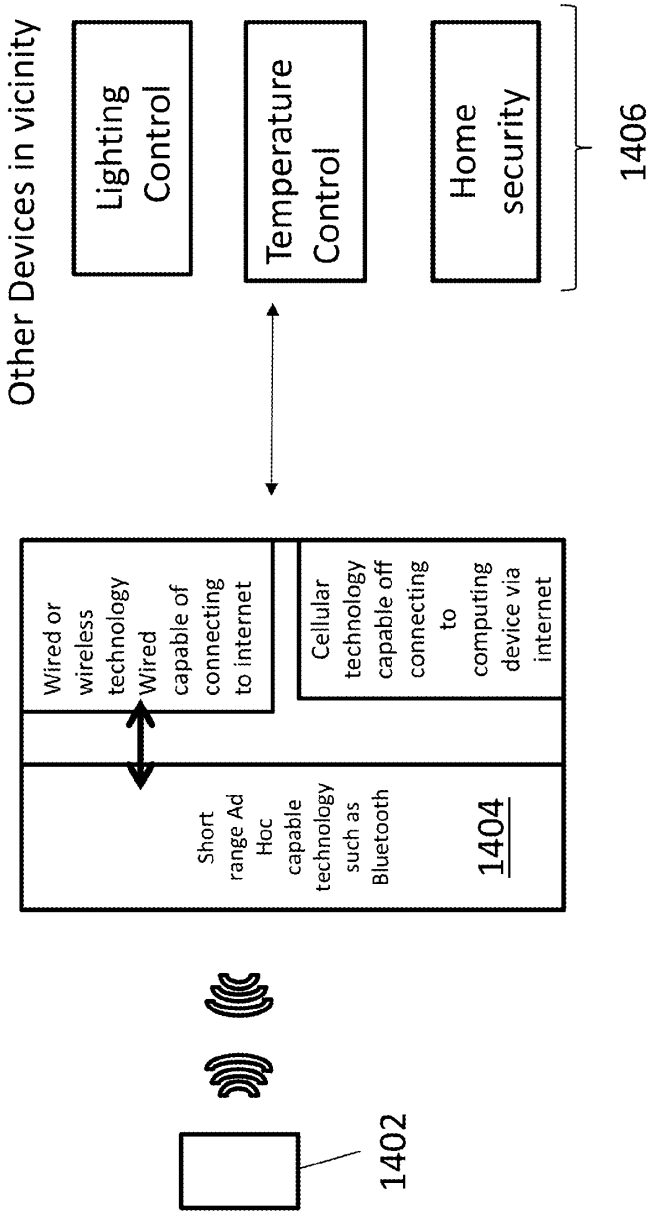
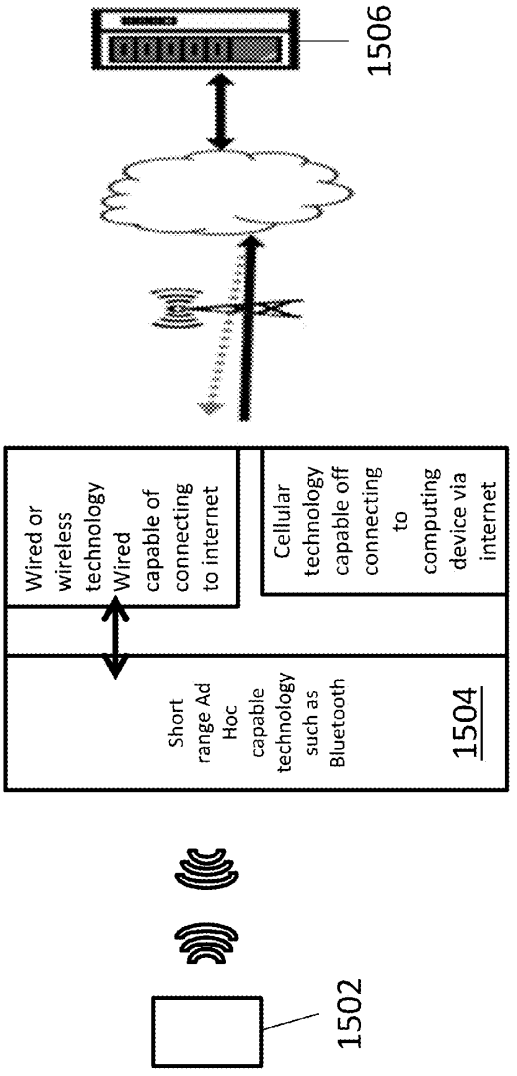

Method of discoverability by device other than mobile of members in vicinity and identifying them by social and personal attributes
Computing device capable off sending messages in text format or multimedia format to members of network after discoverability.
1304
Internet
Wired or wireless technology Wired capable of connecting to internet
Cellular technology capable off connecting to computing device via internet
Short range Ad Hoc capable technology such as Bluetooth
1302
1204
Computing device capable of sending messages to members of network

FIG. 13



1- Stationary Device 1404 detects user 1402 in vicinity
2- Stationary device components are wireless short range technology for detection + Computing device. Or wireless technology component that is connected wired or wirelessly to a computing device

FIG. 14



1- Stationary device 1504 detects user 1502 in vicinity via short range ad hoc signal.
2- Stationary device 1504 components are wireless short range technology for detection + Computing device. Or wireless technology component that is connected wired or wirelessly to a computing device
3- Stationary device connected to sever 1506 via wireless signal to report 1502 presence.

FIG. 15

LOCATION-BASED DISCOVERY OF NETWORK MEMBERS BY PERSONAL ATTRIBUTES FOR ALTERNATE CHANNEL COMMUNICATION

RELATED APPLICATIONS

This application is a continuation-in-part of U.S. application Ser. No. 12/351,654, filed on Jan. 9, 2009, which claims benefit to U.S. Provisional Application No. 61/010,891 filed on Jan. 10, 2008, the contents of which are incorporated by reference herein in their entirety.

FIELD OF INVENTION

The invention relates to discovering members of a social network by associating their personal attributes to the mobile device for the purpose of exchanging information using mobile communication devices and, in particular, exchanging personal information between one or more mobile communication devices.

DESCRIPTION OF RELATED ART

In light of the explosive use of mobile devices, social networks and email addresses, individuals are in need of the ability to exchange customized information such as pictures, social network profiles, emails and phone numbers using their mobile devices.

There are methods to exchange contact information in the form of Vcards. But there is no form of communication using mobile devices that allows discovery by personal attributes for the purpose of exchanging contact information. Furthermore, there is no available technology adapted for allowing mobile device users to easily exchange contact and/or related personal information over the internet for the purpose of social interaction by way of mobile devices.

Some available methods for contact information exchange do not provide discovery by attributes. Rather, these methods assign pin numbers to individuals or offer discovery by a mobile class or mobile ID. Typically, these systems require a user to operate under a common telecommunication service provider operated network. Other methods are based on Bluetooth technology in an ad hoc mode between two devices. These methods usually work only on the same brand mobile devices due to Bluetooth technology limitations, compatibility and security issues.

Communication between two Bluetooth-enabled devices typically requires entering a passkey or security code to allow pairing or communication between any two devices. This desire for maintaining security/privacy, inherent in the design of existing Bluetooth-enabled devices, such as a Smartphone, has imposed undesirable limitations on mobile device users who wish to interact with each other in a social setting.

Other alternatives available for contact information exchange such as Beam technology permit the exchange to take place between similar mobile devices using an infrared signal. This particular solution is, however, limited. For example, it requires a line-of-sight between the devices and does not offer the ability to exchange information such as pictures as a personal attribute and limits the use to a similar brand of hardware transmitting in an ad hoc mode.

U.S. Pat. Nos. 7,454,004; 7,450,966; 6,868,451; 7,440,746; and 7,249,182 focus on contact information storage, retrieval, Bluetooth methods of profiles and exchange of contact information in an ad hoc method.

SUMMARY OF THE DISCLOSURE

In certain embodiments, the invention is directed to a system and method that allows individuals to use their mobile phones to discover others by personal attributes, such as by photos and names, after which, the two parties can exchange information over the internet by bypassing the inherent limitations of existing Bluetooth technology, e.g., security/privacy limitations and compatibility issues that limit or prohibit ad hoc communication, such as when mobile devices of different brands attempt to communicate with each other. In another sense, where there is interference making it difficult to communicate via Bluetooth, WiFi, etc., there is a system disclosed that provides an alternative pathway, network, communication link, etc. available through a cellular phone network, Ethernet or similar wired or wireless connection that is available in the event the local ad hoc network becomes unavailable after initial discovery of an address or other unique identifier for a mobile device.

In one aspect, the invention provides a system and method that enables free discovery of others who also desire social interaction, but without being constrained by hardware compatibility issues inherent in mobile devices by different manufacturers. According to this aspect of the invention, mobile device users (or users) can offer to other, nearby users, their pictures or other information as part of a discovery process, save contacts received from other users, and keep contacts stored on a mobile device up to date by upload/download of personal information through a networked storage device, e.g., an internet-linked storage device accessible through a cellular phone network. The storage device can be configured to frequently push updates of a user's contacts to his/her mobile device. Additionally, the network link with the storage device may be configured to initiate an exchange of photos and other contact information (via access to the network storage) after initial discovery has occurred between users over a Bluetooth-enabled communication link, such as a Bluetooth user's Personal Area Network (PAN).

According to the invention, a process of discovery and exchange of contact information may provide the mobile device user (or users) with an experience of exchanging highly personal information with someone nearby, after that person has been discovered using existing standard Bluetooth technology, but without the need to reprogram or adapt a standard cell phone to permit exchanges of personal information over, e.g., a PAN, such as pictures or a VCard level of personal information. Thus, the invention offers the advantage of not being limited to similar mobile devices, and capable of being implemented on almost any type of mobile communication device, e.g., a standard cell phone, since the personal information exchange does not occur via direct communication between the mobile devices, although the user has this type of experience when socializing since there can be a nearly real time exchange of personal information with someone whom he/she has just discovered over a PAN, or a WiFi network, for example.

It should be noted that while the invention is described as implemented using Bluetooth technology and a Bluetooth-type PAN (Personal Area Network), this is for convenience only and it will be understood that the invention is not limited to Bluetooth, such as the Bluetooth Specification V 2.1+EDR (Enhanced Data Rate) or subsequent derivatives of Bluetooth specifications such as Bluetooth 4.1 and BLE "Bluetooth low Energy" and so forth. Other wireless technologies can be used, including, but not limited to, cellular technology, Wi-Fi, Wi-Max, IEEE 802.11 technology, radio frequency (RF) communications, Infrared Data Association (IrDA) compat-

ible protocols, Local Area Networks (LAN), Wide Area Networks (WAN), and Shared Wireless Access Protocol (SWAP), and Personal Area Networks (PAN).

For purposes of explanation, the following definitions are adopted. A "requesting user" is the person or person(s) who, using a Bluetooth-enabled (that is, more generally, wireless-enabled, as defined above) mobile device, initiates a discovery process, e.g., search for other Bluetooth-enabled devices within a PAN, and a "discovered user" is the person or person(s) having a Bluetooth enabled device that are discovered by the requesting user.

In one example, two persons, a requesting user and discovered or discoverable user are members of a social network that allows the members to communicate with each other over the internet. The network includes a server that stores personal attribute information. A standard Bluetooth discovery process may be initiated by the requesting user. The discoverable user member is discovered, e.g., when the requesting user's mobile device receives a Bluetooth address. Then this address is communicated to the server, and in response the server sends a picture and name, or other information, of the discoverable user to the requesting user. The requesting user's next requests that the server transmit his/her customized invitation or electronic card to the now discovered user. The communication between requesting/discovered users may then proceed by accessing information located over network storage, thereby bypassing the limitations of communication using the Bluetooth protocol. The Bluetooth protocol, in this example, is used to locate someone nearby. But after this discovery, the requesting and discovered users thereafter communicate over the internet. The subsequent interaction may include an exchange of VCards or similar electronic coordinates, SMS or other forms of real-time communication that may be facilitated by the same service that connected the two users to each other, or by a third party service.

According to another aspect of the invention, there is a system and method that allows users of a social network, or more generally database service, to create custom social cards that include social profiles, emails, phone numbers and/or a picture as a personal attribute. In one embodiment, a custom social card associated with the discovered user may be received when a requesting user discovers another member of the service, rather than an uninteresting Bluetooth address or serial number. For instance, the social card may include a picture and a name, personalized icons or card designs, etc. Furthermore, the requesting user may collect a plurality of such social cards when there are many members of the service within the short range network or vicinity, or geographic area as defined by the user who is conducting the search. The social cards are received from the server in response to the requesting user's mobile device uploading mobile device attributes associated with other members of the social network, group or service. If the requesting user elects to make contact with one or more of the members, he/she may send an invitation containing a picture of the requesting user with a personalized message intended to spark an interest in the discovered user. The discovered user may then respond by sending his/her own custom social card, or reject the invitation.

The system includes a network-linked storage facility that collects information provided by members of a group, e.g., members of a social network, along with personal attributes in a data base hosted by a centralized computer with internet connection. The system associates a member's, e.g., phone ID to the member's account/profile. The phone association takes place when the user downloads a client-side application

which collects, among other things, a unique phone characteristic such as a Bluetooth address or serial number.

In accordance with one or more of the foregoing objectives, the invention may be implemented to allow mobile device users to discover other members of the same database service, e.g., a social network, within a vicinity covered by short range wireless networks such as Bluetooth but without being limited by the shortcomings of the Bluetooth or related short range telecommunication standards and/or related hardware incompatibilities. The members can elect to exchange or send personalized, intimate contact information over the internet after the users have discovered each other, thereby bypassing short range security/privacy barriers and/or hardware compatibilities between mobile communication devices from different manufacturers. Hence, the invention enhances and facilitates the sharing of contact information between mobile users. The invention leverages available technology and standard protocols available today such as Bluetooth technology and defined standards within the Bluetooth technology such as Vcard profile and OBEX.

As mentioned earlier, all of the presently known, existing technology for communicating over short range, e.g., infrared or Bluetooth, focus on pushing contact information from one device to another. According to another aspect of the invention, there is a bidirectional exchange of contact information allowing receiving and sending at the same time. There is no slave/master relationship, which is common to all current existing contact exchange technologies between mobile devices.

The invention fills a gap left by the existing standards and technologies when it comes to the actual discovery process and exchange of contact information over the internet by bypassing ad hoc communication and compatibility issues.

According to another embodiment a system for exchanging personal information between a first user and second user includes a server accessible through the internet, the server providing access to stored user profile information about the first and second users including personal attribute information and mobile device addresses; searching, using a first device, for the presence of other mobile devices within the vicinity of the first device using the short range communication protocol, whereupon discovery of a second device the first device receives a unique, identifying attribute of the second device the first mobile device sending from the first device to the server the received identifying attribute for the second device; the server sending to the second device, via the server, an invitation to accept personal information from, or share personal information with the first user, wherein the invitation includes a graphics file associated with the first user's personal attribute information; and the second mobile device accepting or rejecting using the second device the invitation from the first device.

According to yet another embodiment a method for requesting an exchange of personal information using a mobile communication device comprises the steps of: searching for the presence of other mobile devices within a personal area network; receiving a mobile device attribute from one or more nearby mobile devices; and sending one or more of the received mobile device attributes to a server located on the internet, the server being responsive to receipt of the one or more mobile device attributes for transmitting personal information about a respective one or more persons associated with the mobile device attributes received by the server.

According to yet another embodiment, a system for exchanging information among members of a group, such as members of a social network service, includes an internet-based server having a registration portion. After a user has

registered online with the service, the server downloads a client-side application to the mobile device. A registration process is complete when a user receives a copy of a customized social card. And the user may thereafter transmit his/her social card to devices identified over a local network, such as a PAN, or to devices in the vicinity whose location was reported to the server as being close to the first user; or in the geographic area specified in the first user search criteria; or reported in the users database as members in the same vicinity/address/geographical vicinity, wherein, in certain embodiments, those devices/users are also members of the social network of the searching user.

According to another aspect of the invention, there is a method for meeting people including discovering people, e.g., over an ad hoc network, personal area network, etc., viewing their pictures, names, or other personal information, and selecting one or more people to send an invitation. The invitation may take the form of a social card, VCard, or other manner of engaging another person in a social atmosphere, or even a business setting such as a meeting, trade show, conference, etc.

According to another aspect of the invention, there is a method for discovering a person over a first network, and then communicating with that person over a second network after obtaining an electronic coordinate, e.g., a Bluetooth ID address, of the person. The first network can be a Personal Area Network (PAN) and the second network can be a cellular phone network. The method may further include the step of selecting and exchanging information based on pictures received at each of two or more mobile devices based on a mobile phone ID indexing/cross reference at a network server. The mobile device users can be members of a service that operates/maintains the server. The method may further include contacting each mobile user by a message that is presented to the user by a picture displayed on, and selectable by a mobile phone, the picture being sent by a server responsive to a received mobile phone ID or Bluetooth address.

According to another embodiment, a server is capable of providing a communication between a first and second mobile phone user based on receipt of mobile phone identifier, the server communicating via a cellular phone network and the mobile device identifiers being discovered over a PAN or similar local ad hoc network. The server is capable of providing information to phones not capable of exchanging data via Bluetooth or the related ad hoc network communication protocol, and/or not connected to a cellular phone network via a common cellular phone network provider, or provider plan. In certain embodiments, unique ad hoc network identifiers comprising a Bluetooth device address, a WiFi address, or main component address such as IMEI which is the international Mobile Station Equipment identify are exchanged between the devices via the server.

According to another aspect of the invention, there is a method for discovering a person over a first, one-directional network, and then communicating with that person over a second, bi-directional network after obtaining an electronic coordinate, e.g., a Bluetooth address, of the person. The first network can be a Personal Area Network (PAN) and the second network can be a cellular phone network. The one directional network can conduct the discovery utilizing a communication medium having a master-slave relationship, as understood in the art, while the second network can operate by utilizing a network based storage for receiving and responding to requests to send or receive information form each side of the communication, e.g. bi-directional communication between a first and second mobile device.

In accordance with certain embodiments, a system includes a discovery device connected to a short range wireless communication protocol through an ad hoc wireless network which is connected to local computing machine that is connected to the internet and providing connection to a server. The server is configured to communicate for detecting first user presence in vicinity through the discovery device and local computing machine, the first user using a respective first mobile communications device and the discovery device is equipped with short range wireless technology each capable of connecting to the server through an internet connection and each also connected to the short range wireless communication protocol through the ad hoc wireless network. The server is in communication with the internet, and configured to provide access to stored user profile information and preferences of the first user, respectively, including personal attribute information and a mobile communications device address. The server is configured to receive, from the first mobile communications device or from the discovery device, a received unique ad hoc network identifier for the first mobile communications device received, by the discovery device, from the discovery device in response to a search for users in vicinity using the short range communication protocol for the presence of the first mobile communications device on the ad hoc network. The server configured to receive, from the discovery device, the unique ad hoc network identifier of the first mobile communications device and to send to local computing equipment instructions based on user preferences. The local computing device is capable of connecting to other local devices via wireless signal and can control functions. Example of other wireless local devices that maybe connected to the local computing device would be a wireless light controller device, a wireless temperature controller device, and or wireless home security controller device, using the unique ad hoc network identifier, the server which is connected to the local computing device, confirms the first user identity and personal attributes. This can be a onetime event and requires that local computing device stores match between first user unique ad hoc identification, or can be a function required each time the local computing machine detects a unique ad hoc id identifier. Upon receiving confirmation of first user attributes, the local computing device can execute commands based on first user preferences such as instruct lighting device to turn on/off/dim or connect to temperature control device to adjust temperature.

In accordance with certain embodiments, a method includes providing, via a local computing device, accessible internet and connection to server, access to stored user profile information about a first user using a respective first mobile communications device, receiving, via the computing device, from the stationed discovery device, a received unique ad hoc network identifier for the first mobile communications device, received by the first mobile communications device from the discovery device using the short range communication protocol on the ad hoc network, sending, via the computing device, to the other controlling network devices in vicinity, using wireless network, instruction based on first user preferences.

In accordance with certain embodiments, a local device is equipped with short range wireless technology capable of searching for members of the social network in the vicinity and receive from mobile devices unique ad hoc identifier. The local device has wired or wireless connection to the internet and configured to connect to a server, or other service applications that has access to the server and the first user personal attributes. The local device is capable and programmed to perform regular timed searches for members in the vicinity.

And upon identifying members such as First user, the discovery device cause the computing device to perform a method. In certain embodiments, the method includes connecting to the server via internet connection and reporting to the server the first user presence in the vicinity; connecting to other wireless devices in the vicinity to execute functions based on first user preferences such as unlock door, turn lights on, or adjust temperature.

In accordance with certain embodiments, a method includes the use of a computing device that is capable or reporting to the server that specific function were indeed executed based on first user preferences and the server can update profile information accordingly, and may or may not share this information about the first user presence and functions executed to other social network members who are connected to the first user.

In accordance with certain embodiments, a device that is equipped with short range wireless technology, and computing capabilities and is capable of connecting to the internet via a wireless signal or mobile service, the device operable to detect user presence in its vicinity by obtaining a unique ad hoc identifier of the user in the vicinity, the device, upon detecting said user, operable report same to a computing machine to thereby cause the computing machine to:

provide through a wireless network or mobile telecommunications provider network, access to a stored user profile information about a first user by way of a first mobile communication device associated with the first user, and provide a wired or wireless connection to other devices in the vicinity of the first user to execute functions based on saved personal preferences of the first user.

According to certain embodiments, the executed functions are selected from a temperature adjustment, a light activation, or a door lock control.

INCORPORATION BY REFERENCE

All publications, patent applications or patents mentioned in this specification are herein incorporated by reference to the same extent as if each individual publication or patent application was specifically and individually indicated to be incorporated by reference.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** depicts a computer generated display for registering with a service. This service may provide a user with a network-based storage for personal contact information, creation of a custom social card to send to discovered, or requesting, users who are also members of the service, to provide personal contact information to other users and for accessing personal contact information of other users of the service. The service may be part of a social network.

FIG. **2** depicts a database schema/structure for maintaining personal information about a user (member) registered with the service. The information about the member may include, for example, his/her mobile device attributes such as the device key, mobile telecommunications provider; the mobile device type; the member's profile, e.g., name, address, etc.; stored photo(s) of the user; country/state where the member resides; and other information.

FIG. **3** is a flow chart associated with the creation of a social card for sending to requesting and/or discovered users.

FIG. **4** depicts communication links to/from mobile devices and a network-based server, e.g., internet server, over a Cellular Base Transceiver Station (BTS) using standard communication protocols that provide separate facilities for transmission of digital data. As depicted, the mobile devices may communicate by sending pictures of users associated with the device during a discovery process, as facilitated by the server.

FIG. **5** illustrates a discovery process flow chart between a requesting user and three discovered users.

FIG. **6** is a flow chart for a discovery process for associating unique, mobile device identifying attributes, e.g., Bluetooth addresses, with personal attributes between the requesting user and discovered users using information available from the network server. Each mobile device user is a member of the service and has personal contact information accessible through the server.

FIG. **7** is a flow chart depicting the processing of the requesting user's request to exchange information with the discovered users. In this example Jane Doe has selected one of the three discovered users after receiving the results of the scan, i.e., pictures and names of everyone within the discovery range, e.g., PAN, of Jan Doe's mobile device.

FIG. **8** describes additional aspects of notifications and responses to requests for exchange of electronics coordinates, or personal information from FIG. **7**.

FIG. **9** is depicts establishment of communication between users, such as for example SMS, E-mail, chat/instant messaging, in the form of text or multimedia, video, etc., between consenting users.

FIG. **10** depicts an arrangement in which a server receives GPS coordinates from users, compares these coordinates to determine proximity, and informs the users of the proximity.

FIG. **11** depicts an arrangement relating to a process of ad hoc discovery of members between a mobile device and a discovery device that is capable of connecting via short range and connected to the network via Internet enabling technology wired or wireless.

FIG. **12** is directed to an arrangement in which a server/computing device **1202** communicates bi-directionally with user devices **1204** by way of a cellular base transceiver station (BTS) **1206** through a standard that also provides separate facilities (not shown) for transmission of digital data.

FIG. **13** is directed to a system and method of discoverability by a device other than the mobile devices of members in vicinity and identifying them by social and personal attributes.

FIG. **14** is directed to system and method in which a user/member **1402** is shown connected, via an ad hoc network, to a device **1404** equipped with short range ad hoc capable technology, such as Bluetooth.

FIG. **15** is directed to system and method in which a user/member **1502** is shown connected, via an ad hoc network, to a device **1504** equipped with short range ad hoc capable technology, such as Bluetooth.

DETAILED DESCRIPTION

According to one aspect of the disclosure, mobile device users sign up, or register with a service that enables the exchange of personal information through a network-based server. After a user provides mobile device information and a phone number, an internet-based centralized computer system (hereinafter "Server") sends to the mobile device a notification via SMS (Short Messaging Service). The SMS message, also known as a text message, alerts the new user to click on an internet link to install the service provider's client-side application on his/her mobile device. Of course other procedures for loading the client-side application onto the user's mobile device can be used, and the SMS message modality is not to be construed as a limitation.

The user provides information by filling out an on-line profile, including uploading graphics or pictures. An example of a computer generated sign-up screen is shown in FIG. **1**. Additional aspects of the registration process include creating a social card, which is intended to be sent to discovered users with whom the user wishes to communicate, and/or to a requesting user upon being discovered, e.g., via a Bluetooth communication protocol or the other technologies delimited above.

As mentioned above, the registration process also includes download of the client-side application (CSA); it resides on the mobile device, is enabled to communicate directly with the service, e.g., to synchronize/update addresses, access account information via username/password, or phone ID, send requests for information about users, send invitations, accept, exchange deny requests for exchange of information, obtain instances of the server addresses, etc. The registration process may be completed when the mobile device receives the customized social card through the resident CSA. Additional aspects of the possible functionalities of the client side application are provided below. Personal and other user information can also be added by way of the CSA for storage on the server, including hobbies, business associations, or personal information as examples. This and other information can also be added for storage on the server means other than the CSA, such as the user's personal computer, a dedicated kiosk, or other means for accessing the server through the internet.

Preferably, in order to take advantage of the functionalities provided by the service, the member of the service ("member") should have a mobile communication device that provides separate facilities (besides voice transmission) for transmitting digital data. This allows a mobile phone to act like any other computer over the Internet, sending and receiving data via the Internet Protocol. FIG. **4** illustrates how communication between mobile users and the Server is conducted. In certain embodiments, communication between the member's mobile devices and the server goes through a Cellular Base Transceiver Station (BTS), and communicates according to a packet-based telecommunications protocol such as GPRS, 3G or any alternative data technology.

Hereinafter the short range communication network used in the examples will primarily be described in terms of the Bluetooth standard. However, as explained above, it should be remembered that other forms of short-range communication may instead be used, e.g., WiFi.

One format for storing information about a user/member of the service is shown in FIG. **2**. Depicted herein are some of the types of user information that may be stored and made accessible to the user at the server. Users may provide personal attributes such as name, address, and a picture. Information about the user's mobile device may include the make, model, and phone number.

The service provided to users may be operated/accessible under a centralized computer system ("server"), which may include three components: 1) Graphical user interface, providing an interface to members of the network to sign up, input/edit profile information, etc. 2) A scripting language designed for producing dynamic web pages such as PHP. This is a middle layer scripting that manages programming commands. 3) A comprehensive data base that includes user's information, for example as discussed above and shown in FIG. **2**.

FIG. **3** is a flow chart depicting a process for registering with the service:

Step **1**: Account set up and information provided through a web-based User Interface, e.g., such as shown in FIG. **1**;

Step **2**: The Server sends an SMS with URL link for download of the CSA;

Step **3**: The CSA collects characteristics from the mobile device such as a Bluetooth address for the purpose of associating the mobile device with a user account maintained at the Server. This association between a Bluetooth address and information in the associated user's account e.g., a photo, allows the display of interesting personal information such as a picture (as opposed to simply a Bluetooth address, device type, etc.) among members during discovery, such as depicted in FIG. **5**. In this manner members can interact with each other in a way intended to facilitate social interaction, without being limited to only the information made available through existing, hardware independent and limited communication ability as adopted under the Bluetooth standard.

Step **4**: To complete installation of the CSA, the server provides the mobile device with a copy of the member's social card and account information. Thereafter, the user may update, replace, revise the social card or personal attribute information, modify, hide or publish profile information (at the server) as contained in the user's contact information, e.g., the information contained in the user's Vcard which may be sent when the user accepts, or a discovered user accepts an invitation to exchange contact information.

Some of the other functions that may be included in the CSA are discussed below. As mentioned above, FIG. **5** illustrates how the Server may associate each mobile device with a member account of the service using a Bluetooth device ID address. During the installation process, the Server may send the CSA to the mobile device and also obtain from the mobile device its unique Bluetooth device ID address (BD_ADDR). Every mobile device with Bluetooth capability has a unique 48-bit address. The installed application sends the Bluetooth address to the server and associates the member with this particular mobile device. Example of an obtained BD_ADDR 48-bit would be: 00:23:7A:04:E2:C4. Alternative user device information can be for instance main component address such as IMEI which is the international Mobile Station Equipment identify.

As known in the art, a Bluetooth-enabled device permits the user to perform an inquiry to find other devices, located within the mobile device's PAN, to be connected to it via the Bluetooth communication standard and configured to respond to inquiries from the requesting user. However, the Bluetooth protocol only provides device name, ID address and/or device class, if requested. Communication between two devices over Bluetooth requires pairing or acceptance by its owner, but the connection itself can be initiated by any device and held until it goes out of range. The initial contact or discovery of another member according to the invention may be established by this standard form of communication. Once contact is made and the Bluetooth device ID address of the discovered user obtained, then personal contact information is received from the network-based service, as explained above, in response to the initial, identifying information about the mobile device. It should be noted that contact among users is not limited to this users within a PAN (personal area network). Rather, users within the vicinity of each other discovered using location-based services or other means can establish contact in the manner described herein.

Referring again to FIG. **5**, the Bluetooth standard may be used to accomplish two tasks: First is to obtain a device address. Second, to perform an inquiry utilizing Bluetooth software layers and architecture. After these tasks are complete, all subsequent communications can be facilitated through the server, which may be via a bi-directional method of personal contact information exchange.

As will be understood in light of the disclosure, a bi-directional method for exchange is capable of automating the process of data packet transfer and receipt from both devices reducing the time and human involvement required from both parties to cause the aforementioned processes according to the invention to occur. Thus, in one sense a bi-directional mode of communication may enhance the social experience because it gives the users a sense that the invitation, response and a follow-up exchange (if there is interest) is occurring in near real-time (e.g., as if the devices were actually communicating over a PAN). In the Bluetooth spec, the standard requires that one party is a master and the other party is a slave. All data exchange requires a push and/or pull between the master and slave. A bi-directional method identifies both parties as masters and the exchange is managed from both directions as both parties are communicating to a centralized computer system rather than directly. This bi-directional process can allow the users to process multiple requests through the server without waiting for a single process between two devices that can handle only one push or one pull at a time for example.

It will be appreciated in light of the disclosure that the bi-directional mode of communication method offers the advantage of facilitating an ongoing exchange between mobile device users. That is, the server can receive and send information simultaneously to both users, as opposed to a master-slave type relationship. Thus, in one sense this aspect of the invention may be thought of as providing master-master type communication protocol whereby each mobile device can send and receive information independent of the other mobile device. It will be understood that "master" in this sense does not mean or imply that only a Bluetooth protocol is necessarily contemplated.

Unlike communication using Bluetooth, which is limited by security constraints between paired devices (inherent in the Bluetooth standard), and/or related hardware compatibility issues between mobile devices, all of which are greatly limited in the kinds of information that may be exchanged using standard hardware/software platforms on mobile devices, the invention allows a user to essentially bypass these constraints so that a more personal interaction becomes possible using a standard mobile communication device, such as one equipped with Bluetooth or other protocols for wireless or wired communication. Wireless technologies for this purpose include, but are not limited to, cellular technology, Wi-Fi, Wi-Max, IEEE 802.11 technology, radio frequency (RF) communications, Infrared Data Association (IrDA) compatible protocols, Local Area Networks (LAN), Wide Area Networks (WAN), and Shared Wireless Access Protocol (SWAP), and Personal Area Networks (PAN).

It will be readily apparent that the invention provides a medium for near real-time exchange of contact information, unlike E-mail, SMS or other modes of communication between mobile devices. In this sense the user experience is enhanced over the exchange of E-mail or texting among phones, in at least three ways. First and most obviously, a requesting device is not limited to conversing with only members that he/she can contact through a known e-mail address, phone number, etc. Second, the exchange may proceed simply by initiating discovery and/or responding to a discovery request. Third, the exchange can occur among multiple members of a service at the same time.

Of course once consenting contact has been established between two or more users, other types of communication between them, for example SMS, E-mail, chat/instant messaging, in the form of text or multimedia, video, etc., can also be facilitated. This is depicted in FIG. **9**. The centralized computer system ("server") **902** may include, or be associated with, an SMS server platform **904** or E-mail platform **906** that provides a corresponding channel of communication between the users **908**A, **908**B. The users are shown communicating directly with one another via SMS platform **904** and/or E-mail platform **906**, facilitated by server **906**.

FIG. **6** illustrates the discovery of the three discovered users from FIG. **5** using the requesting user's mobile device. The requesting user's resident CSA, upon receiving the three respective Bluetooth device ID addresses, i.e., addresses for device **1**, device **2** and device **3**, (the "addresses" may be broadly construed to include any unique identifier such as a Bluetooth device address, or unique identifier selected from a WiFi address, or main component address or an IMEI which is the international Mobile Station Equipment identify) sends this information to the network server via the cellular phone network. The server, after matching the discovered members' using the uploaded information, transmits back to the requesting user(s) mobile device a picture and name, or other information, for each of the discovered devices, which are then displayed on the mobile device's screen. The discovery process may thus include the showing of personal or intimate information that a member may wish to have displayed during the initial discovery step, rather than merely a device ID or address, device type, etc. At this point the requesting user has received a list of pictures and names which he/she can now select from the mobile device if further contact is desirable.

In one example, in a first step of the discovery process, a user scans the surrounding area covered by Bluetooth short range wireless signal, and obtains all Bluetooth addresses of members in the area. In the second step, the server associates all or some of these Bluetooth addresses with member profiles in the data base (each of which may contain the information described in FIG. **2**) and provides the requesting user conducting the discovery with the results of the discovery in the form of personal attributes of nearby members including their pictures and names, which may be a social card for each of the members of the service. If a device address is not associated with a member of the service, the Server will report to the user conducting the discovery that the address as "Unknown" or provide generic information such as the device class or device name per Bluetooth standards.

FIG. **7** shows in further detail how users may discover each other, in four steps:

Step **1**: The results of a discovery are provided to the requesting user, who receives personal attributes including pictures and names of four other discovered users. Four is not a limit and greater numbers of discovered users is contemplated. The requesting user (User #1) selects the one or more of the discovered users from the list (using functions available through the CSA) that he wishes to exchange contact information with. This request is received by the CSA, such as through the mobile device's touch-sensitive screen for selecting one or more displayed social cards or icons displaying a discovered user's picture and name (e.g., as shown in the drawings). Once the mobile device user selects one or more discovered users by screen, keypad, mouse, pen, etc., the CSA can then initiate automatic access information to the Server. Form this point, the server proceeds to distribute the social card or other information to the selected discovered user(s). The distributed social card or other information can be preset, and/or it can be controlled by the discovering user during the instant session.

Step **2**: The Server receives the request from User # **1** CSA, which in this case is a request to exchange or send contact information to User # **2**(and/or # **3**, **190 4**, etc). The Server sends a notification to User # **2** (and/or # **3**, # **4**) alerting her of

User #**1**'s request to exchange personal contact information. This alert is sent in the form of User # **1**'s custom social card providing personal attributes (including name and picture) and requesting User # **2** to either accept, ignore or exchange contact information.

Step **3**: User # **2** informs the server with her choice of accepting, ignoring or exchanging contact information. This command, like the others issued by User # **2**, is processed by the CSA on the User # **2** mobile device which engages in a two way communication with the Server via internet protocol for example.

Step **4**: If the choice selected by User # **2** is exchange contact information, User # **2** will receive User # **1**'s customized social card. The CSA on User # **2**'s device obtains this information from the Server via the internet protocol. The information may be received in the form of Vcard and stored in User # **2**'s local, mobile device resident address book as well stored under User # **2**'s account in the Server's database. User # **1** can receive User # **2**'s customized social card in the same manner and the contact information may also be stored in User # **1**'s local, mobile device resident address book as well as stored under User # **1**'s account at the Server's database. If User # **2**'s choice was "ignore", then the CSA may send, via the internet protocol a rejection notification to User # **1**. This may be in the form of an alternative customized social card for User # **2**, or simply by a text message rejection. The third choice, "accept", causes the CSA on User # **2**'s mobile device to receive User # **1**'s information only, but not send her card in exchange.

The communication between the Server application and CSA are conducted via common standards such as HTTP (A protocol used to request and transmit files, especially WebPages and webpage components, over the Internet or other computer network). Communication between the CSA and Server may utilize the well known XML format (A meta-language written in SGML that allows one to design a markup language, used to allow for the easy interchange of documents over the World Wide Web).

FIG. **8** shows a further example of notification to discovered users alerting them to an exchange request. The notification shows other users' personal attributes including name and photo.

The server database may store any contact information exchanged and add it through a synchronization method with the client side application on the mobile device address book, if the user elects to store the information locally.

In other embodiments, the invention may be practiced using other short range wireless communication protocols such as WiFi or WiMax in lieu of Bluetooth if the mobile devices have chipsets that support such a wireless signal, as described above.

Associating the mobile device using Bluetooth information as described in connection with FIGS. **3**, **5** and **6** may, in alternative embodiments, be accomplished with GPS (Global Positioning System) information association subject to ability to locate devices and associate them by location of cellular towers or chipsets.

In certain embodiments, the server can track locations of participating members, and report these locations to nearby members. Location tracking can be based on GPS and/or WiFi or other known protocols. In this manner, members who are not Bluetooth-enabled, or outside of Bluetooth or short range wireless signal can still be discovered and connected to other members who are close by. FIGS. **4** and **10** depict such an arrangement, wherein server **1002** (FIG. **10**) is shown receiving GPS coordinates from Users **1004**A and **1004**B, comparing these coordinates to determine proximity, and informing the users of the proximity. Informing one user of another's proximity can be contingent upon consent of the users, as obtained above, and can be performed in gradations, for example initially sending limited information of one user to another, then increasing the delivered information and establishing contact depending on consent. In certain embodiments, the participating members report their locations to the server, for example periodically, and the server maintains a record of and updates these reported locations, and provides reports to certain users, for examples to those belonging to a common social network. User profiles of users who are connected can be updated to reflect this information by the server/computing device.

In certain embodiments, the CSA, residing on the mobile device, may have the following software functionality.

An "Authentication" portion requests authentication parameters from a user (ID or user login name and password); connects to an instance of server; sends user authorization information to the server side using ID or user name and password; displays a reason for denied access in case of incorrect login; and exits from the software in case of a preset number of incorrect logins; allows a user to change the password; and downloads profile information from the server.

A "Synchronize" portion retrieves a list of contacts from the server (getCard?cmd=all) and stores contents of the result set to the local address book (create new contacts and update existing contacts); periodically retrieves the list of pending and changed contacts from the server (udateCard?cmd=pending and getCard?cmd=changed) and stores contents of the result set to the local address book (create new contacts and update existing contacts); and scans the local address book for changes and new entries and sends those changes to the server.

Optionally, the service may connect to another social network database through APIs, which are application programming interfaces, to access other social network users attributes such as name and picture.

The methods of connecting and application programming interface would differentiate from one social network to another and be proprietary to the respective social networks. An application programming interface (API) is a set of routines, protocols, and tools for building software applications.

An API expresses a User Attributes such as name, picture and any additional information on the user. The API expresses as well the social network operations, inputs, outputs, and underlying types.

A "Bluetooth Exchange Contacts" portion allows a user to discover devices with the application installed nearby by Bluetooth; for the devices in which a client application is resident download limited information (name, title) and a picture; display the list of found Bluetooth devices with mentioning if a device from the list has a CSA running or not; allow a user to select devices from the list of found devices (one or multiple); allow a user to initiate the sending of his contact information, e.g., social card, to the selected devices; Send the user's profile to the selected device(s): If the CSA is running on the device then send the profile as profile including ID and picture; if a CSA is not installed or running on the device then send the profile as a VCARD (text/vcard MIME type); listen for inbound connections from clients; accept requests for brief information. Additionally, this module sends a partial contact information in response to a request; accepts requests for card exchange; ask a user for confirmation/send user confirmation back; accepts contact information and stores it locally; and sends own contact information.

In certain embodiments, the process of ad hoc discovery of members can be between a mobile device and a discovery

device that is capable of connecting via short range and connected to the network via Internet enabling technology wired or wireless. Such an arrangement is shown in FIG. **11**. The discovery device **1102** can be planted at a particular location—for example a convention center—and coupled wirelessly or by wireline to the computing device/server **1104**, for example through a network **1105**. The reporting device **1102** operates to discover users **1106**A, **1106**B who are in the vicinity, and report same to the computing device/server **1104**. The computing device/server **1104** can then send users (**1106**A, **1106**B) who were discovered in the vicinity short text message or multimedia message informing them of the presence of each other. The discovery device **1102** can connect through wireless or wired communication methods, potentially through a network **1108**, to additional devices **1110** to execute functions based on the detected users of the network in the vicinity. Such functions can be based on user preference, and include "network of things" functionality, such as turning lights on or off, controlling thermostats to adjust temperature, locking or unlocking doors, and similar remote object control.

FIG. **12** is directed to an arrangement in which server/computing device **1202** communicates bi-directionally with user devices **1204** by way of a cellular base transceiver station (BTS) **1206** through a standard that also provides separate facilities (not shown) for transmission of digital data. Server **102** is capable of offering services to the users associated with devices **1204**, who may be members a social networking service, such as ability to chat with each other after discoverability, or exchange emails. The users/members can report their geographical position to the server/computing device **1202**, and which is capable of reporting to other members the personal attributes, for example from the social network, of other members in the vicinity or beyond.

FIG. **13** is directed to a system and method of discoverability by a device other than the mobile devices of members in vicinity and identifying them by social and personal attributes. In FIG. **13** a device **1302** is equipped with short range ad hoc capable technology, such as Bluetooth, and discovers users/members **1204** of a social network. This is communicated to server/computing device **1304**, which is capable of sending messages, for example in text format or multimedia format to discovered users/members **1204**. Device **1302** may also be equipped with wired or wireless technology to be capable of connecting to the internet, and/or cellular technology capable of connecting to server/computing device **1304** via internet.

FIG. **14** is directed to system and method in which a user/member **1402** is shown connected, via an ad hoc network, to a device **1404** equipped with short range ad hoc capable technology, such as Bluetooth. Device **1404** may also be equipped with wired or wireless technology to be capable of connecting to the internet, and/or cellular technology capable of connecting to other devices **1406**, for example via internet.

FIG. **15** is directed to system and method in which a user/member **1502** is shown connected, via an ad hoc network, to a device **1504** equipped with short range ad hoc capable technology, such as Bluetooth. Device **1504** may also be equipped with wired or wireless technology to be capable of connecting to the internet, and/or cellular. Device **1504** is connected to sever **1506** via wireless signal to report the presence of user/member **1502**.

Having thus described at least one illustrative embodiment of the invention, various alterations, modifications and improvements will readily occur to those skilled in the art. Such alterations, modifications and improvements are intended to be within the scope and spirit of the invention. Accordingly, the foregoing description is by way of example only and is not intended as limiting.

The invention claim is:

1. A system comprising:

a computing device configured to allow communication between a plurality of members of a social network for any of connecting through said social network and exchanging personal information between a first user and a second user, the first user using a respective first mobile communications device and the second user using a respective second mobile communications device each operatively connected to any of a mobile telecommunications provider network and an internet connection to access said computing device;

the computing device in communication with said first user and said second user through said first mobile communications device and said second mobile communications device, wherein said computing device connects said first mobile communications device and said second mobile communications device to the internet using any of the mobile telecommunications provider network and a Wi-Fi connection;

the computing device configured to provide access to stored user profile information relating to said first user and said second user, respectively, wherein said stored user profile information comprises any of a picture, name, and location of a respective user;

the computing device configured to receive an inquiry from said first user about members in said social network who are close by in proximity to a current location of said first user to permit connection through said social network and for exchanging contact information between the users;

the computing device configured to return said inquiry by providing a user profile information of said members, wherein said user profile information comprises attributes comprising any of a picture, name, and location of a respective member, and wherein said computer device reports to said first user said attributes of all members who are close by in proximity to said current location of said first user;

the computing device configured to receive information identifying locations of the first user and cross reference with any of a location of said second mobile communications device, and locations of multiple users that are close by in proximity to said current location of said first user;

the computing device configured to receive a unique device hardware identifier from each mobile communication device from each linked member in said social network to associate and link to a respective member profile to authenticate said respective member as a linked member;

the computing device configured to determine proximity of the locations of the first and second mobile communication devices and other communication devices of other users to one another and to send to the second mobile communications device an invitation to connect to said first user or accept personal attribute information, or share personal attribute information with, the first user;

the computing device configured to provide services between users for personal communication, the personal communication comprising services including one or more of SMS, E-mail, chat/instant messaging, multimedia, voice, or video; and

the computing device configured to provide personal attributes comprising any of a picture, name, and loca-

tion of members in a vicinity of one another to permit connections and exchange of contact information between said members,

wherein the first and second users are members of a same social network, and the computing device is operable to disclose social network attributes including a picture, name, and location of first and second users in the vicinity or within a particular distance from one another for the purpose of connecting members.

2. The system of claim **1**, wherein the computing device is operable to provide any of the first and second user with social network attributes including pictures, names, location, and location proximity of all users in the social network in the vicinity or close by in proximity to any of the first and second user.

3. The system of claim **1**, wherein the computing device is configured to receive an inquiry from the first user about other members of said social network who are close by in proximity to the first user.

4. The system of claim **1**, wherein the computing device is configured to report to the first user social network attributes including pictures, names, and locations of all members of the social network who are close by in proximity to the first user.

5. The system of claim **4**, wherein the computing device is configured to receive from the first user a selection of one or more additional users with whom the first user wishes to any of connect with through said social network and exchange social attributes.

6. The system of claim **5**, wherein the computing device is configured to send to the first user social attributes such as a picture, name, and location of one or more of the selected additional users.

7. The system of claim **5**, wherein the computing device is configured to obtain the permission of the selected additional users prior to said sending contact information or personal attributes or connecting members through said social network when user permission is required.

8. The system of claim **1**, wherein the computing device is configured to update the profile information to indicate that the first and second users are connected.

9. The system of claim **1**, wherein the computing device is configured to update the profile information to indicate that the first and second users are connected.

10. A method comprising:

providing, via a computing device, accessible through any of an internet connection and a mobile telecommunications provider network, access to stored user profile information about a first user using a respective first mobile communications device and a second user, using a respective second mobile communications device;

receiving, via the computing device, indications of the locations of the first and second mobile communications devices;

receiving, via the computing device, a unique device hardware identifier from all communications devices from all users linked in a social network to associate with profiles and authenticate when users sign in to a user account;

sending, via the computing device, to the second mobile communications device, an invitation to accept any of an invitation to connect and personal attribute information from, or share personal attribute information with, the first user, upon receipt of permission from the second user to receive personal attribute information about, or share personal attribute information with, the first user; and

connecting, via the computing device, the first user and the second user through the computing device for personal communication between first user and the second user, the personal communication comprising one or more SMS, E-mail, chat/instant messaging, multimedia, voice or video,

wherein the computing device is configured to locate information about the second user from a social network file of the second user, and transmit this information to the first mobile communications device, and

wherein the first and second users are members of a same social network, and the computing device is operable to disclose social network attributes such as a picture, name, and a location of first and second users in the vicinity or within a particular distance from one another for the purpose of connecting members.

11. The method of claim **10**, wherein the computing device is operable to provide the first and/or second user with social network attributes such as a picture, name, and location of all users in the social network in the vicinity or close by the first and/or second user.

12. The method of claim **10**, wherein the computing device is configured to receive an inquiry from the first user regarding other users in the social network in proximity to a location of the first user.

13. The method of claim **10**, wherein the computing device is configured to report to the first user social network attributes including a picture, name, and location of all members of the social network who are close by in proximity to the first user, and wherein the computing device is configured to provide personal attributes comprising any of a picture, name, and location of members in a vicinity of one another to permit connections and exchange of contact information between said members.

14. The method of claim **13**, wherein the computing device is configured to receive from the first user a selection of one or more additional users with whom the first user wishes to any of exchange social attributes and connect with.

15. The method of claim **14**, wherein the computing device is configured to send to the first user social attributes of one or more of the selected additional users.

16. The method of claim **14**, wherein the computing device is configured to obtain permission of the selected additional users prior to said sending.

17. The method of claim **10**, wherein the computing device is configured to update the profile information to indicate that the first and second users are connected.

18. The method of claim **10**, wherein the computing device is configured to update the profile information to indicate that the first and second users are connected.

19. The method of claim **18**, wherein the computing device reports a location of users by determining a proximity of said users to other users based on original location information entered during an initial registration process.

20. A non-transitory machine readable medium storing instructions that, when executed by a computing device, cause the computing device to perform a method, the method comprising:

providing, via a computing device, accessible through any of an interne connection and a mobile telecommunications provider network, access to stored user profile information about a first user using a respective first mobile communications device and a second user, using a respective second mobile communications device;

receiving, via the computing device, indications of the locations of the first and second mobile communications devices;

receiving, via the computing device, a unique device hardware identifier from all communications devices from all users linked in a social network to associate with profiles and authenticate when users sign in to a user account;

sending, via the computing device, to the second mobile communications device, an invitation to accept any of an invitation to connect and personal attribute information from, or share personal attribute information with, the first user, upon receipt of permission from the second user to receive personal attribute information about, or share personal attribute information with, the first user; and

connecting, via the computing device, the first user and the second user through the computing device for personal communication between first user and the second user, the personal communication comprising one or more SMS, E-mail, chat/instant messaging, multimedia, voice or video,

wherein the computing device is configured to locate information about the second user from a social network file of the second user, and transmit this information to the first mobile communications device, and

wherein the first and second users are members of a same social network, and the computing device is operable to disclose social network attributes such as a picture, name, and a location of first and second users in the vicinity or within a particular distance from one another for the purpose of connecting members.

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Alharayeri

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(45) **Date of Patent: *May 31, 2016**

(54) **LOCATION-BASED DISCOVERY OF NETWORK MEMBERS BY PERSONAL ATTRIBUTES USING DYNAMIC AND STATIC LOCATION DATA**

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USPC 455/41.2, 412.2, 414.1, 426.1, 432.3, 455/434, 456.3
See application file for complete search history.

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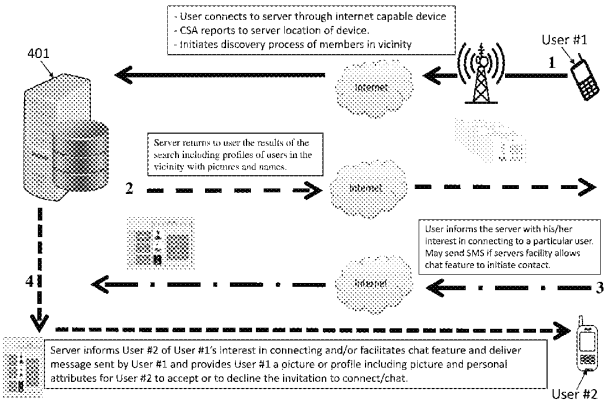
(57) **ABSTRACT**

A technique for allowing members of the same social network using mobile devices to discover others in the vicinity by personal attributes and in specific picture(s) and name for the purpose of connecting, and the ability to use functions provided by a social network such as SMS, e-mail, chat/instant messaging, multimedia, or video by using unique hardware identification of each member mobile device and personal login information that are stored in a network server computing device; and associating the unique apparatus of the members' hardware with the members' personal profile such that when a search is initiated between members, the results contain the members' profile's picture(s), name, location and additional information as stored in the profiles. The proximity of the users is determined by static or dynamic location of the actual device location identified through mobile radio frequency location technology and internet IP information and saved in the user profile.

32 Claims, 9 Drawing Sheets



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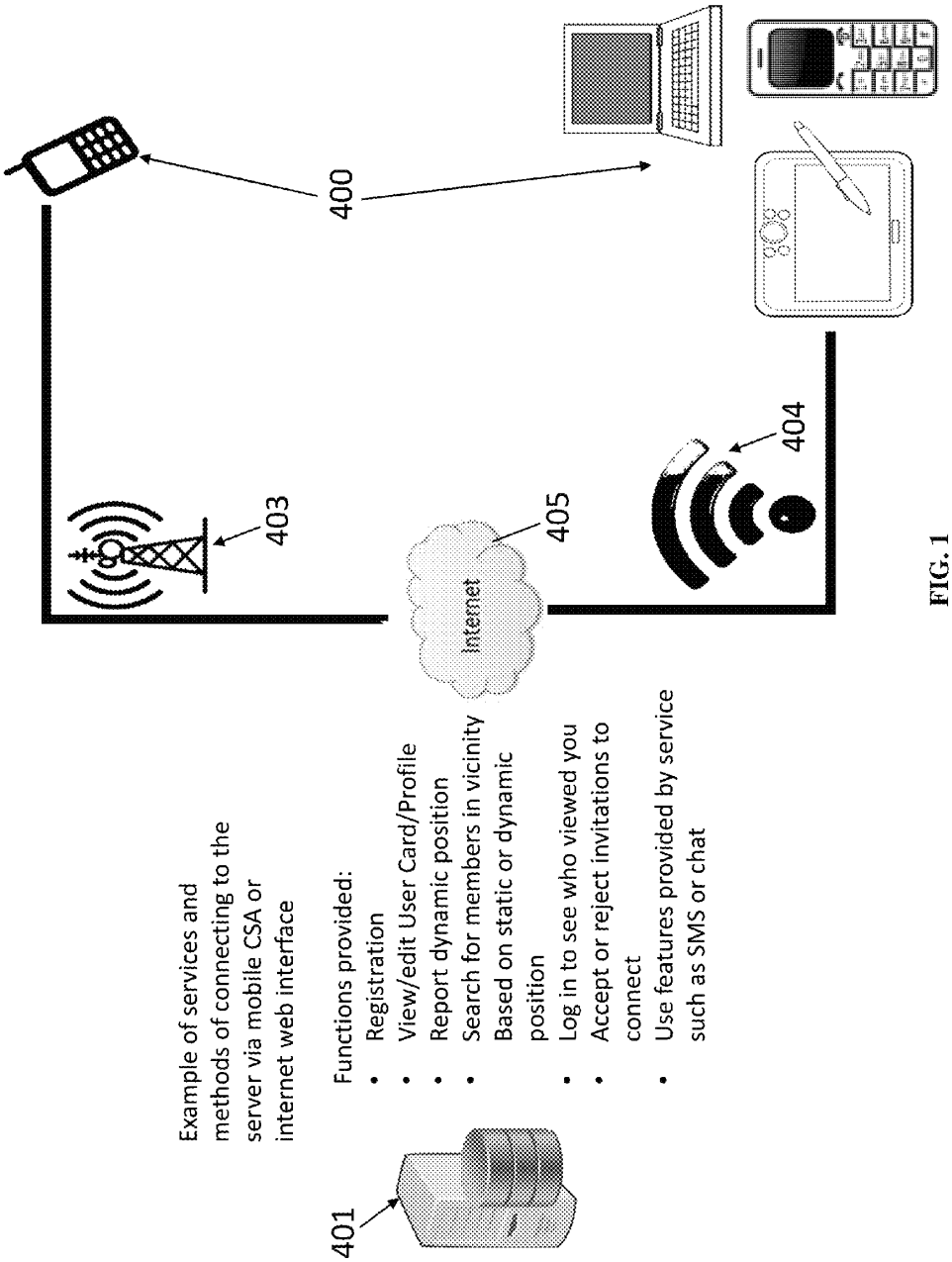
400
403
405
Internet
404
401
Example of services and methods of connecting to the server via mobile CSA or internet web interface
Functions provided:
• Registration
• View/edit User Card/Profile
• Report dynamic position
• Search for members in vicinity Based on static or dynamic position
• Log in to see who viewed you
• Accept or reject invitations to connect
• Use features provided by service such as SMS or chat

FIG. 1

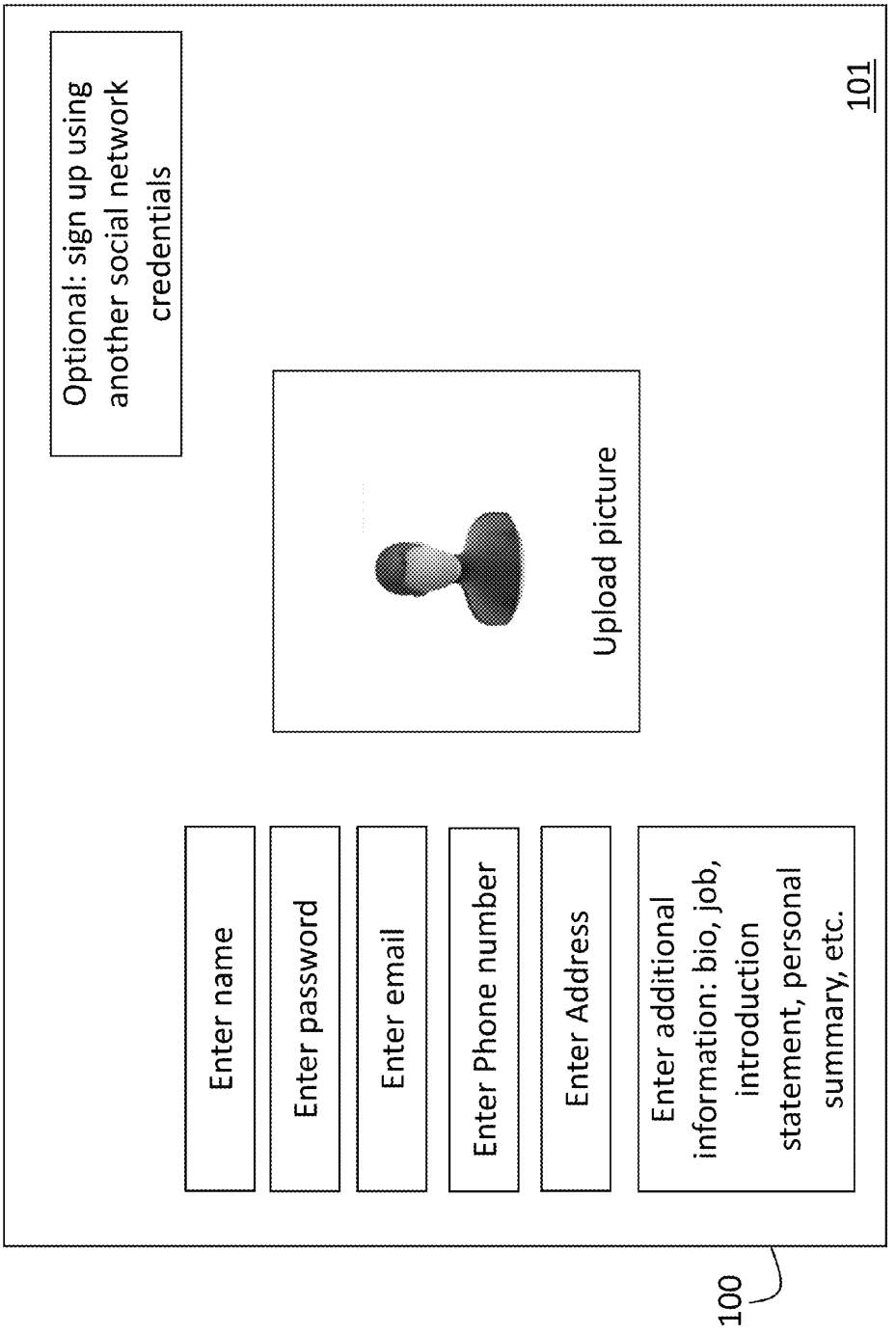
Optional: sign up using another social network credentials
Upload picture
Enter name
Enter password
Enter email
Enter Phone number
Enter Address
Enter additional information: bio, job, introduction statement, personal summary, etc.
101
100

FIG. 2

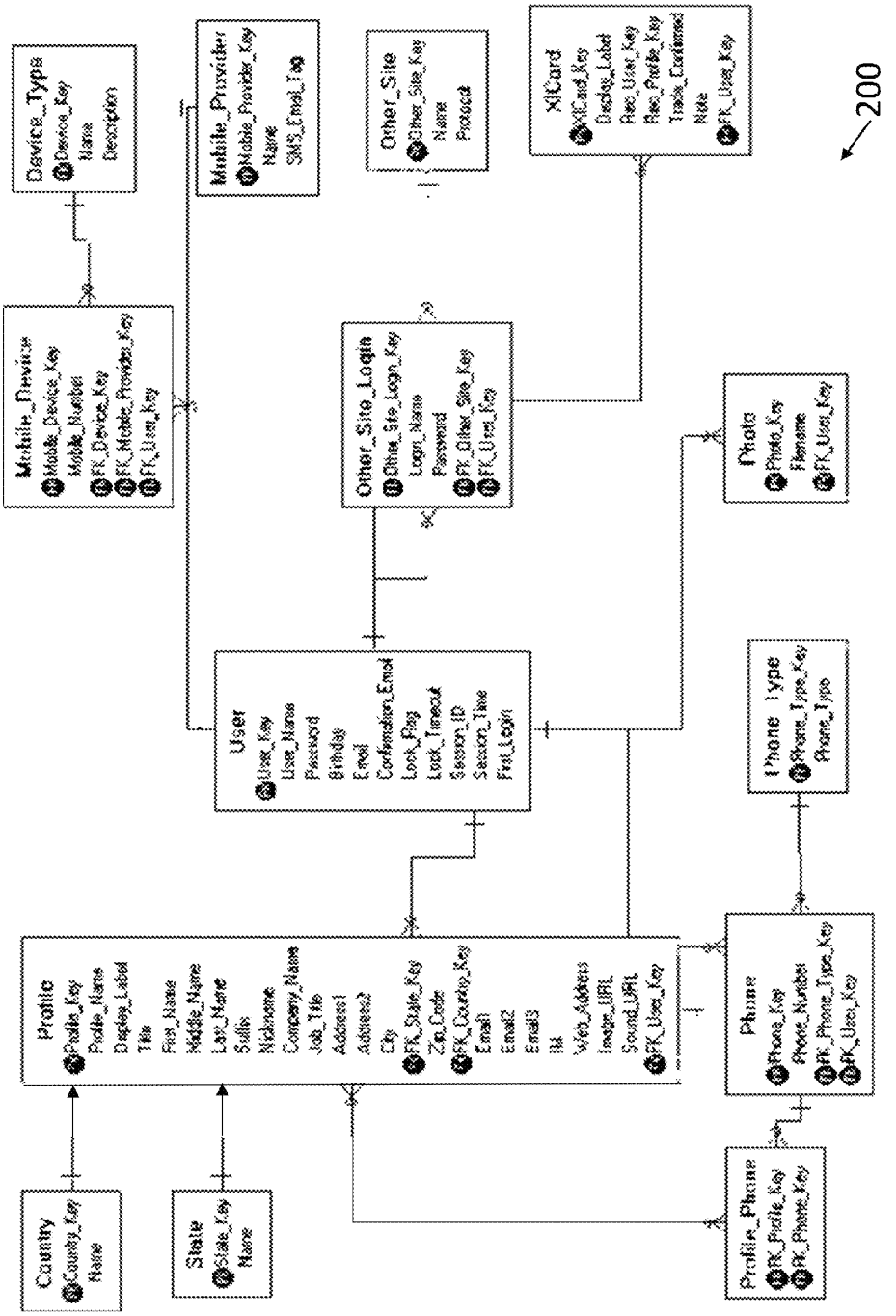
200
Device_Type
Device_Key
Name
Description
Mobile_Provider
Mobile_Provider_Key
Name
SMS_Email_Exp
Other_Site
Other_Site_Key
Name
Protocol
XtCard
XtCard_Key
Display_Label
Rec_User_Key
Rec_Profile_Key
Trade_Confirmed
Note
FK_User_Key
Mobile_Device
Mobile_Device_Key
Mobile_Number
FK_Device_Key
FK_Mobile_Provide_Key
FK_User_Key
Other_Site_Login
Other_Site_Login_Key
Login_Name
Password
FK_Other_Site_Key
FK_User_Key
Photo
Photo_Key
Filename
FK_User_Key
User
User_Key
User_Name
Password
BirthDate
Email
Confirmation_Email
Lock_Flag
Lock_Timeout
Session_ID
Session_Time
First_Login
Phone_Type
Phone_Type_Key
Phone_Type
Profile
Profile_Key
Profile_Name
Display_Label
Title
First_Name
Middle_Name
Last_Name
Suffix
Nickname
Company_Name
Job_Title
Address1
Address2
City
FK_State_Key
Zip_Code
FK_County_Key
Email
Email2
Email3
IM
Web_Address
Image_URL
Sound_URL
FK_User_Key
Phone
Phone_Key
Phone_Number
FK_Phone_Type_Key
FK_User_Key
Country
County_Key
Name
State
State_Key
Name
Profile_Phone
FK_Profile_Key
FK_Phone_Key

FIG. 3

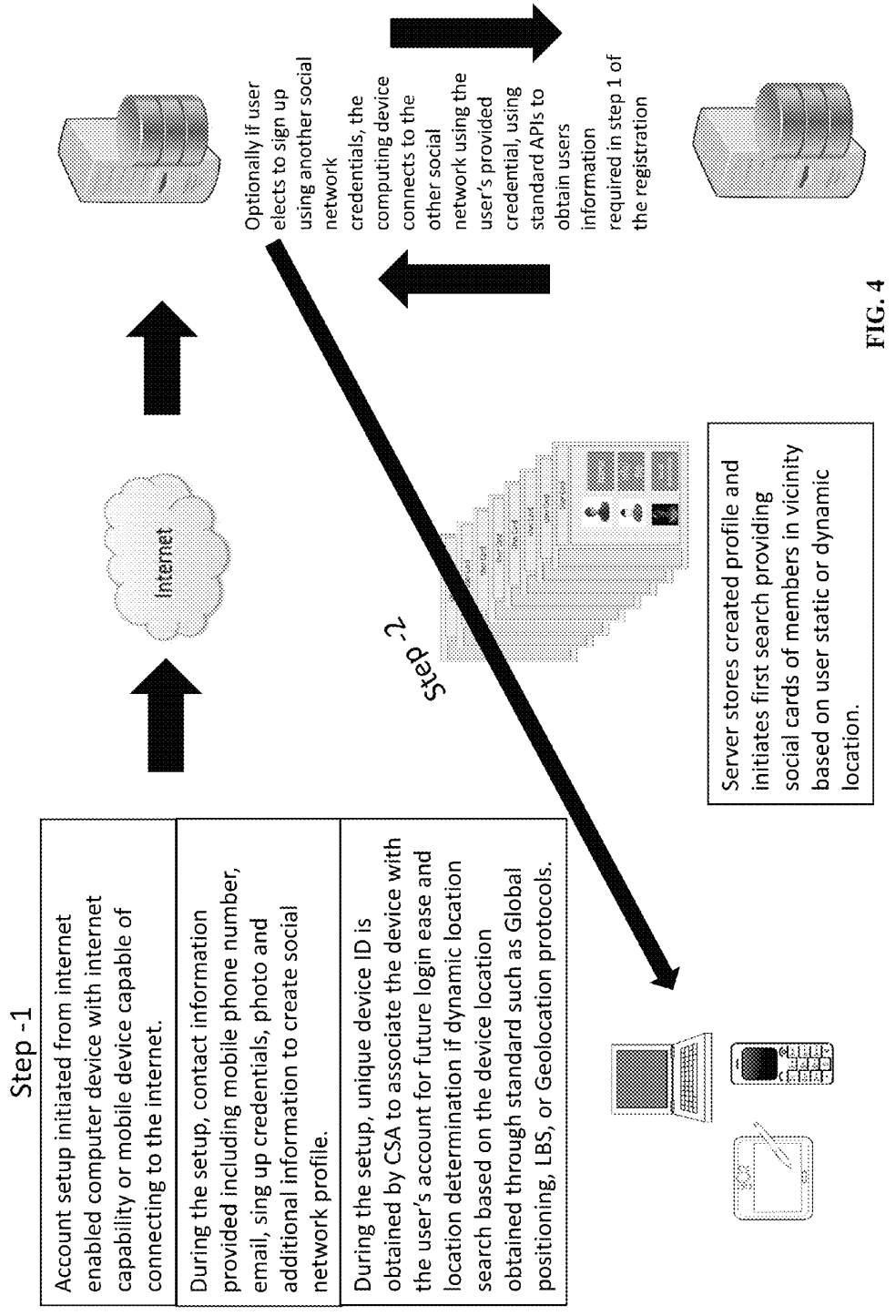
Step -1
Account setup initiated from internet enabled computer device with internet capability or mobile device capable of connecting to the internet.
During the setup, contact information provided including mobile phone number, email, sing up credentials, photo and additional information to create social network profile.
During the setup, unique device ID is obtained by CSA to associate the device with the user's account for future login ease and location determination if dynamic location search based on the device location obtained through standard such as Global positioning, LBS, or Geolocation protocols.
Internet
step -2
Server stores created profile and initiates first search providing social cards of members in vicinity based on user static or dynamic location.
Optionally if user elects to sign up using another social network credentials, the computing device connects to the other social network using the user's provided credential, using standard APIs to obtain users information required in step 1 of the registration

FIG. 4

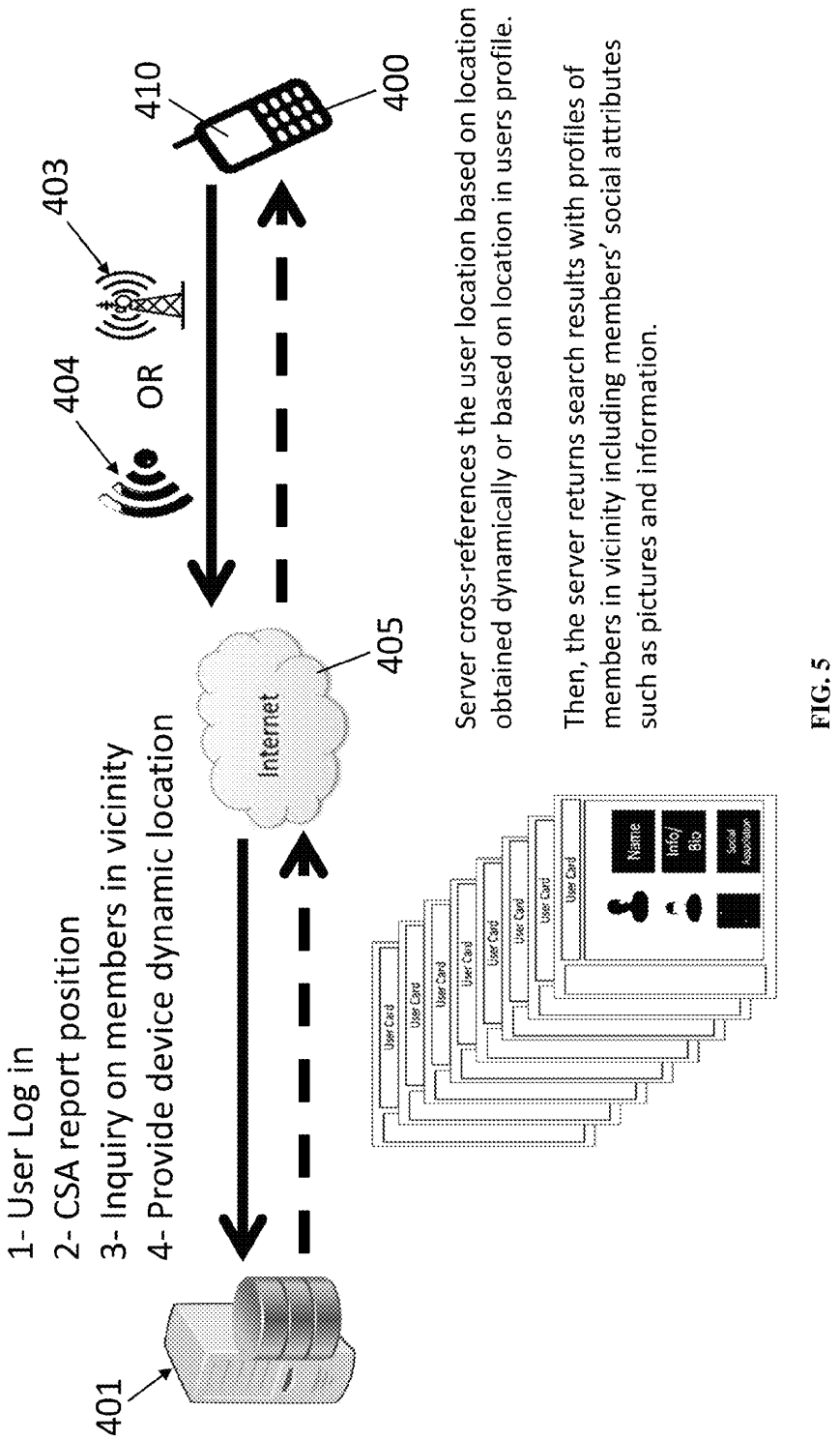
1- User Log in
2- CSA report position
3- Inquiry on members in vicinity
4- Provide device dynamic location
401
Internet
405
403
404
OR
410
400
Server cross-references the user location based on location obtained dynamically or based on location in users profile.
Then, the server returns search results with profiles of members in vicinity including members' social attributes such as pictures and information.
User Card
Name
Info/ Bio
Social Association

FIG. 5

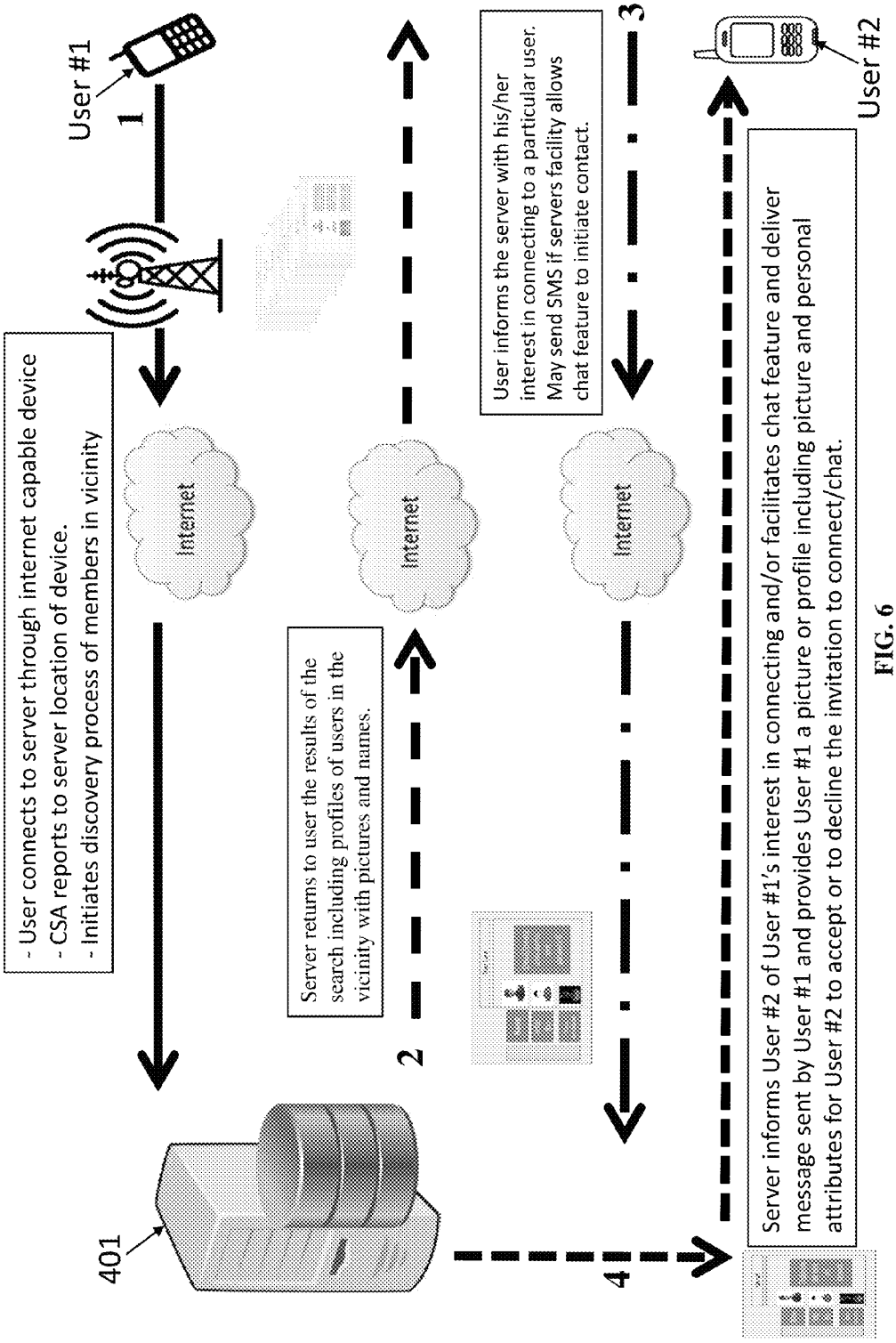
User #1
1
- User connects to server through internet capable device
- CSA reports to server location of device.
- Initiates discovery process of members in vicinity
Internet
2
Server returns to user the results of the search including profiles of users in the vicinity with pictures and names.
Internet
3
User informs the server with his/her interest in connecting to a particular user. May send SMS if servers facility allows chat feature to initiate contact.
Internet
User #2
4
Server informs User #2 of User #1's interest in connecting and/or facilitates chat feature and deliver message sent by User #1 and provides User #1 a picture or profile including picture and personal attributes for User #2 to accept or to decline the invitation to connect/chat.
401

FIG. 6

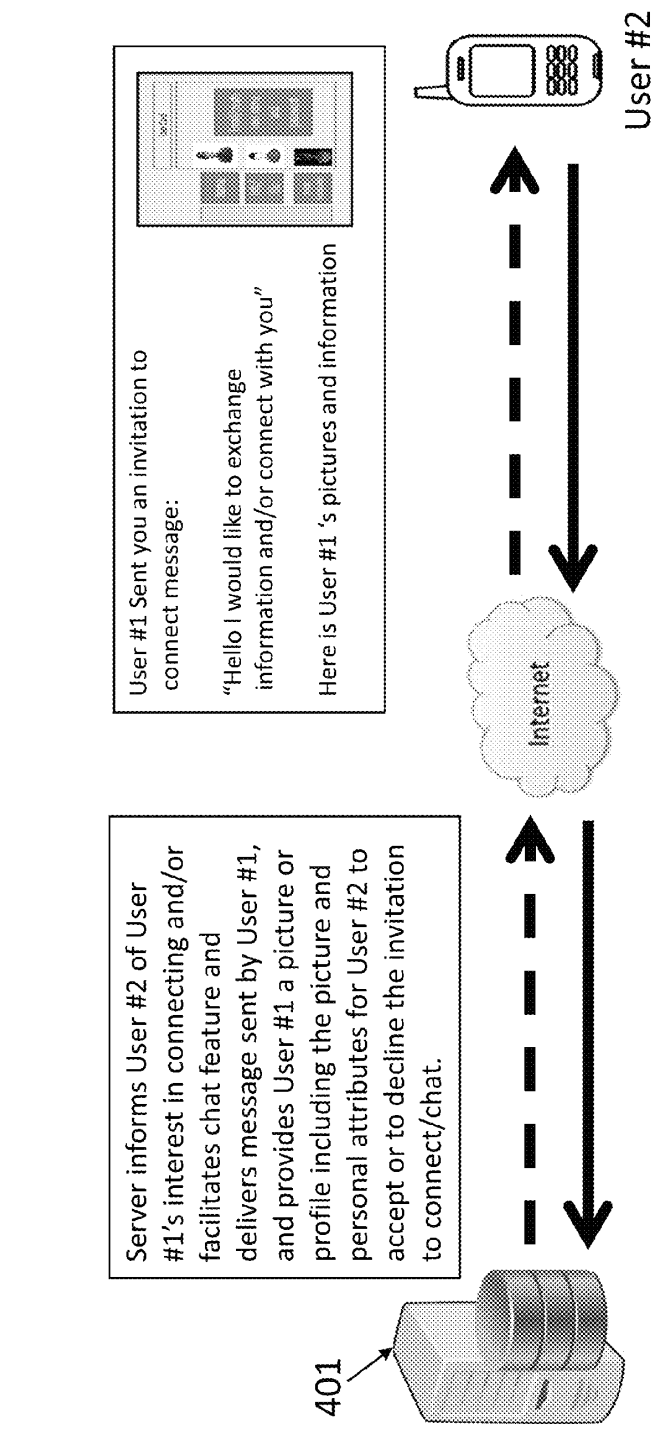
User #1 Sent you an invitation to connect message:
"Hello I would like to exchange information and/or connect with you"
Here is User #1 's pictures and information
User #2
Internet
Server informs User #2 of User #1's interest in connecting and/or facilitates chat feature and delivers message sent by User #1, and provides User #1 a picture or profile including the picture and personal attributes for User #2 to accept or to decline the invitation to connect/chat.
401
User #2 options:
1- Ignore invitation
2- Accept invitation and informs server of acceptance so members are now connected through a social network and are able to exchange further information or use features provided to connected members.
3- Replying to the SMS/chat feature indicating acceptance or request further information before accepting invitation.

FIG. 7

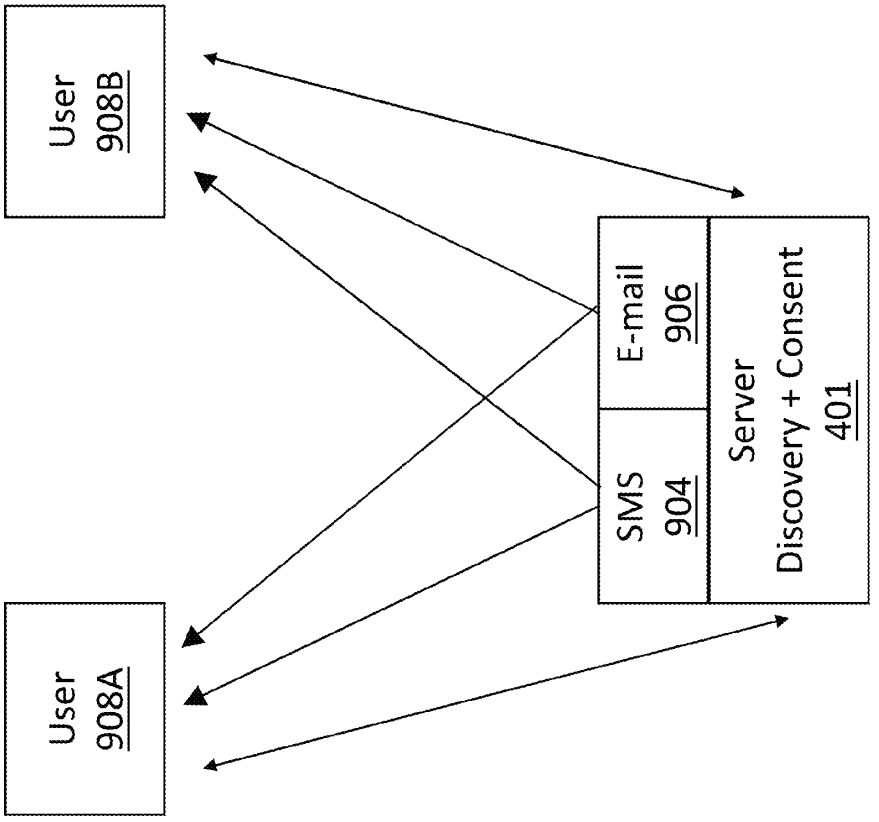
User
908B
User
908A
E-mail
906
SMS
904
Server
Discovery + Consent
401

FIG. 8

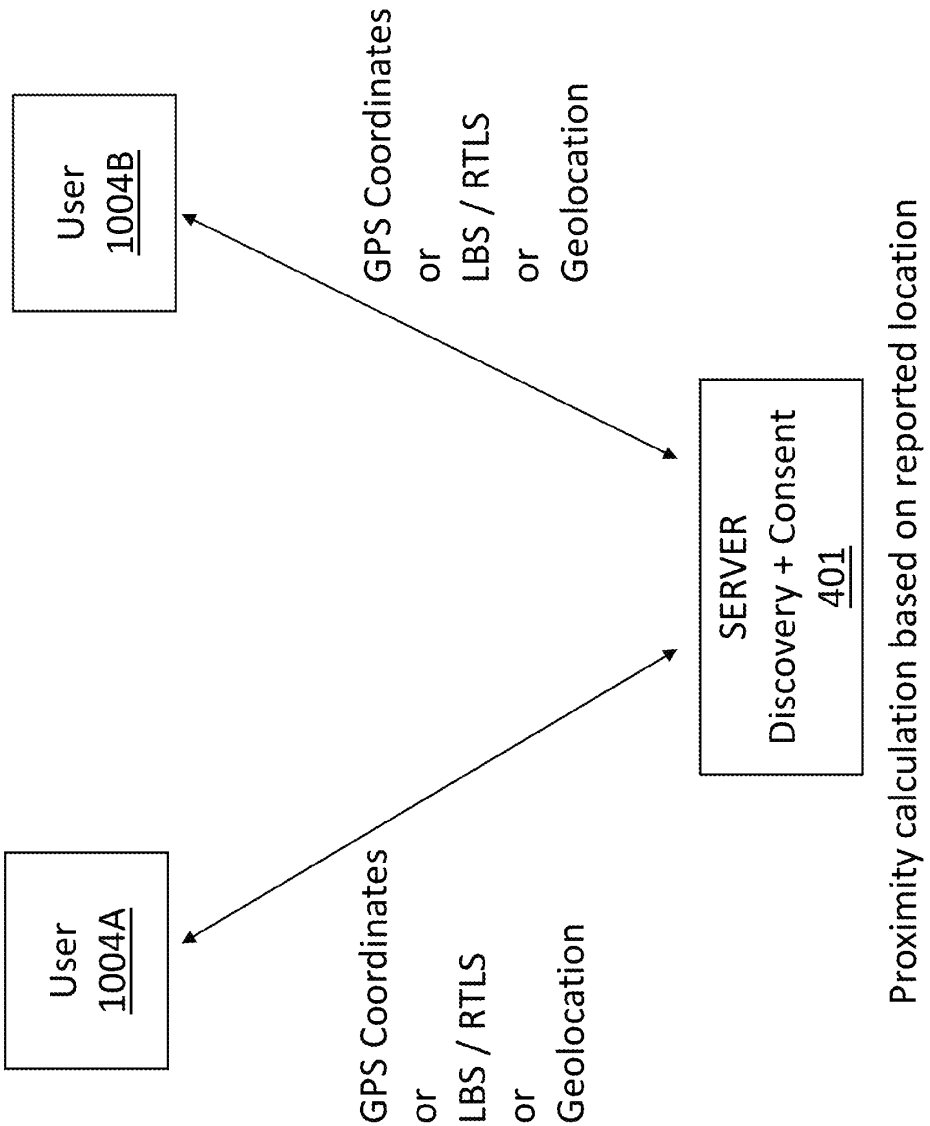
User
1004B
GPS Coordinates
or
LBS / RTLS
or
Geolocation
SERVER
Discovery + Consent
401
Proximity calculation based on reported location
User
1004A
GPS Coordinates
or
LBS / RTLS
or
Geolocation

FIG. 9

LOCATION-BASED DISCOVERY OF NETWORK MEMBERS BY PERSONAL ATTRIBUTES USING DYNAMIC AND STATIC LOCATION DATA

CROSS-REFERENCE TO RELATED APPLICATIONS

This application is a continuation-in-part of U.S. application Ser. No. 14/570,779, filed on Dec. 15, 2014, which is a continuation-in-part of U.S. application Ser. No. 12/351,654, filed on Jan. 9, 2009, now U.S. Pat. No. 8,914,024, issued on Dec. 16, 2014, which claims benefit to U.S. Provisional Application No. 61/010,891 filed on Jan. 10, 2008, the complete disclosures of which, in their entireties, are herein incorporated by reference.

BACKGROUND

1. Technical Field

The embodiments herein generally relate to communication systems, and more particularly to device connectivity in a communications network.

2. Description of the Related Art

In light of the explosive use of mobile devices, social networks and email addresses, individuals are in need of the ability to exchange customized information such as pictures, social network profiles, emails and phone numbers using their mobile devices. There are methods to exchange contact information in the form of virtual cards (Vcards). However, there is generally no form of communication using mobile devices that allows discovery by personal attributes for the purpose of exchanging contact information. Furthermore, generally there is no available technology adapted allowing mobile device users to easily exchange contacts and/or related personal information over the internet for the purpose of social interaction by way of mobile devices without limitations to hardware brands.

Available methods for contact information exchange do not typically provide discovery by attributes. Rather, these methods assign pin numbers to individuals or offer discovery by a mobile class or mobile ID. Typically, these systems require a user to operate under a common telecommunication service provider operated network. Other methods are based on Bluetooth® technology in an ad hoc mode between two devices. These methods usually work only on the same brand mobile devices due to Bluetooth® technology limitations, compatibility and security issues.

In recent years, social networks began collaboration and establishment of an API protocol which stands for Application Programming Interface that allows for social networks to connect to each other with given permission from the user, to import data or pictures from one social network to another. Yet no method generally allows members of various social networks to interexchange contact information, or offer third party solution dedicated to members connecting with others whom are not known to members based on the vicinity and common interest.

Communication between two Bluetooth-enabled devices typically requires entering a passkey or security code to allow pairing or communication between any two devices. This desire for maintaining security/privacy, inherent in the design of existing Bluetooth-enabled devices, such as a Smartphone, has imposed undesirable limitations on mobile device users who wish to interact with each other in a social setting.

Other alternatives available for contact information exchange such as Beam technology permit the exchange to take place between similar mobile devices using an infrared signal. This particular solution is, however, limited. For example, it requires a line-of-sight between the devices and does not offer the ability to exchange information such as pictures as a personal attribute and limits the use to a similar brand of hardware transmitting in an ad hoc mode.

U.S. Pat. Nos. 6,868,451; 7,249,182; 7,440,746; 7,450,996; and 7,454,004, the complete disclosures of which, in their entireties, are herein incorporated by reference, focus on contact information storage, retrieval, Bluetooth® technology methods of profiles and exchange of contact information.

Additionally, there has been advanced ability to precisely determine mobile devices locations but all the standards in place are geared towards identifying devices locations as instruments. There are no human face associated with the searches in those standards and no links to social networks. They are simply industry standards without connection to exploding applications and methods of mobile devices use.

Multiple advanced technologies have been added to the mobile phone industry by International Organizations for Standards to provide accurate dynamic reporting of the mobile devices. Some of the standards adopted are: LBS (Location Based Service) based on GPS (Global local positioning), RTLS Real-Time Locating System, as noted in ISO/IEC 19762-5 and ISO/IEC 24730-1 and Geolocation which is also the latitude and longitude coordinates of a particular location. Geolocation uses radio Frequency RF location, TDOA (Time Difference Of Arrival), information from cell towers to triangulate the approximate position, and Internet Protocol (IP) address among other information to determine the exact address of a mobile device or terminal connected to the internet. The terms and definitions are standardized by ISO/IEC 19762-5:2008.

SUMMARY

In view of the foregoing, an embodiment herein provides a system comprising a computing device configured to communicate with various mobile and terminal devices to manage introduction and connection of members belonging to a same network by sharing personal attributes between members such as picture(s) and name, wherein the computing device associates unique hardware identification of member devices and login credentials with member profiles and via a search process returns searches of members for others in a vicinity or in proximity thereto, and with personal attributes comprising pictures and names bringing an image of a human face to a device allocation in the search process; and a first user using a respective first mobile communications device and a second user using a respective second mobile communications device each capable of connecting to the internet through any of a mobile telecommunications provider network and a local area wireless network, wherein the computing device being in communication with the first and second mobile communication devices through internet connection via an application installed on the respective first and second mobile communication devices of the users, and configured to provide access to stored user profile information about the first user and the second user, respectively, including personal attributes comprising picture(s), a name, information, and a location, wherein the computing device is configured to store static locations of members and receive information identifying current dynamic locations of all members based on real time location reporting from a client side application, wherein the computing device is configured to calculate and determine a proximity of user locations based on any of a static and a dynamic location of the members which are updated on a

profile database of the members, wherein the computing device is configured to send to the first user upon inquiring of other members in the vicinity of the first user, personal attributes of all other members based on proximity calculations to select members that the first user may wish to connect with, and to send to the second mobile communication device an invitation on behalf of the first user and including first user personal attributes for the second user to accept connecting with the first user, wherein the computing device is configured to connect the first user and the second user through a members-only-social-network communication tools between the first user and the second user, wherein the communication tools comprise any of SMS, E-mail, chat/instant messaging, multimedia, voice, and video, and wherein the computing device is configured to locate information about the second user from a social network storage file of the second user, and transmit this information to the first mobile communications device for further information beyond first introductory attributes such as picture and name only.

The first and second users may be members of a same social network, and the computing device may be operable to disclose social network attributes of the first and second users in the vicinity or within a particular distance from one another for connecting members. The computing device may be configured to receive customized parameters from the first user on a search vicinity scope and a customized selection of a start point other than a current user location. The computing device may be operable to provide any user with the social network attributes of all members in the social network in the vicinity or in proximity thereto. The computing device may be configured to receive an inquiry from the first user regarding members in proximity to a first user location. The computing device may be configured to recommend to members other members in the vicinity to connect with to promote social interaction. The computing device may be configured to report to the first user social network attributes of all members of the social network who are in proximity to the first user. The computing device may be configured to receive from the first user a selection of one or more additional users with whom the first user wishes to connect with through the social network.

The computing device may be configured to send to the first user further social attributes of one or more of selected additional users beyond the picture and name used in the introductory search results. The computing device may be configured to obtain permission of a selected user prior to revealing further information beyond an introductory picture and name when a user preference is set for such a permission requirement. The computing device may be configured to update profile information to indicate that the first and second users are connected. The computing device may be configured to store communication between members and synchronize saved communication on a client side application used on devices for communication. The computing device may be configured to assess a proximity of users to one another based on any of a static location information in a user profile and updated location indicators of a user dynamic location. The updated location indicators may be based on user location information reported to the computing device by any of mobile device real time location reporting technology and internet protocol address location information and saved to profiles of users. The computing device may permit discoverable members to have their respective devices turned on or turned off at a time of a search being conducted by the first user, and the computing device may permit the discoverable members to have their respective devices unconnected to an internet connection service at the time of the search being conducted by the first user, wherein any of turned off devices and disconnected devices may be discoverable by the computer device as the internet connection service is configured to report the any of turned off devices and disconnected devices as discoverable based on a latest static and dynamic location in proximity to the first user.

Another embodiment provides a method comprising using a computing device to communicate with various mobile and terminal devices to manage introduction and connection of members belonging to a same network by sharing personal attributes between members such as picture(s) and name, wherein the computing device associates unique hardware identification of member devices and login credentials with member profiles and via a search process returns searches of members for others in a vicinity or in proximity thereto, and with personal attributes comprising pictures and names bringing an image of a human face to a device allocation in the search process; providing a first user using a respective first mobile communications device and a second user using a respective second mobile communications device each capable of connecting to the internet through any of a mobile telecommunications provider network and a local area wireless network; using the computing device to be in communication with the first and second mobile communication devices through internet connection via an application installed on the respective first and second mobile communication devices of the users, and to provide access to stored user profile information about the first user and the second user, respectively, including personal attributes comprising picture(s), a name, information, and a location; using the computing device to store static locations of members and receive information identifying current dynamic locations of all members based on real time location reporting from a client side application; using the computing device to calculate and determine a proximity of user locations based on any of a static and a dynamic location of the members which are updated on a profile database of the members; using the computing device to send to the first user upon inquiring of other members in the vicinity of the first user, personal attributes of all other members based on proximity calculations to select members that the first user may wish to connect with, and to send to the second mobile communication device an invitation on behalf of the first user and including first user personal attributes for the second user to accept connecting with the first user; using the computing device to connect the first user and the second user through a members-only-social-network communication tools between the first user and the second user, wherein the communication tools comprise any of SMS, E-mail, chat/instant messaging, multimedia, voice, and video; and using the computing device to locate information about the second user from a social network storage file of the second user, and transmit this information to the first mobile communications device for further information beyond first introductory attributes such as picture and name only.

The first and second users may be members of a same social network, and wherein the method further comprises using the computing device to disclose social network attributes of the first and second users in the vicinity or within a particular distance from one another for connecting members. The method may further comprise using the computing device to receive customized parameters from the first user on a search vicinity scope and a customized selection of a start point other than a current user location. The method may further comprise using the computing device to provide any user with the social network attributes of all members in the social network in the vicinity or in proximity thereto. The

method may further comprise using the computing device to receive an inquiry from the first user regarding members in proximity to a first user location. The method may further comprise using the computing device to recommend to members other members in the vicinity to connect with to promote social interaction.

The method may further comprise using the computing device to report to the first user social network attributes of all members of the social network who are in proximity to the first user. The method may further comprise using the computing device to receive from the first user a selection of one or more additional users with whom the first user wishes to connect with through the social network. The method may further comprise using the computing device to send to the first user further social attributes of one or more of selected additional users beyond the picture and name used in the introductory search results. The method may further comprise using the computing device to obtain permission of a selected user prior to revealing further information beyond an introductory picture and name when a user preference is set for such a permission requirement. The method may further comprise using the computing device to update profile information to indicate that the first and second users are connected.

The method may further comprise using the computing device to store communication between members and synchronize saved communication on a client side application used on devices for communication. The method may further comprise using the computing device to assess a proximity of users to one another based on any of a static location information in a user profile and updated location indicators of a user dynamic location. The updated location indicators may be based on user location information reported to the computing device by any of mobile device real time location reporting technology and internet protocol address location information and saved to profiles of users. The method may further comprise using the computing device to permit discoverable members to have their respective devices turned on or turned off at a time of a search being conducted by the first user; and using the computing device to permit the discoverable members to have their respective devices unconnected to an internet connection service at the time of the search being conducted by the first user, wherein any of turned off devices and disconnected devices may be discoverable by the computer device as the internet connection service is configured to report the any of turned off devices and disconnected devices as discoverable based on a latest static and dynamic location in proximity to the first user.

These and other aspects of the embodiments herein will be better appreciated and understood when considered in conjunction with the following description and the accompanying drawings. It should be understood, however, that the following descriptions, while indicating preferred embodiments and numerous specific details thereof, are given by way of illustration and not of limitation. Many changes and modifications may be made within the scope of the embodiments herein without departing from the spirit thereof, and the embodiments herein include all such modifications.

BRIEF DESCRIPTION OF THE DRAWINGS

The embodiments herein will be better understood from the following detailed description with reference to the drawings, in which:

FIG. **1** illustrates communication links to/from mobile devices and a network-based server; according to an embodiment herein;

FIG. **2** illustrates an example of a computer or mobile device, and a generated display for registering with a service, according to an embodiment herein;

FIG. **3** illustrates an example of a database schema/structure for maintaining personal information about a user (member) registered with the service, according to an embodiment herein;

FIG. **4** is a flowchart associated with the creation of a social card and a user account/profile to initiate the use of the service of discovering others in the vicinity with personal attributes such as pictures and names, according to an embodiment herein;

FIG. **5** illustrates a discovery process flowchart, according to an embodiment herein;

FIG. **6** is a flowchart for a discovery process between users, according to an embodiment herein;

FIG. **7** is a flowchart depicting the processing of a user initiating discovery and showing interest to connect to a second user where all communication is managed by the server, according to an embodiment herein;

FIG. **8** illustrates the establishment of the communication between users, according to an embodiment herein; and

FIG. **9** illustrates an arrangement in which a server receives GPS/LBS/GEOLOCATION coordinates from users, compares these coordinates to determine proximity, and informs the users of the proximity, according to an embodiment herein.

DETAILED DESCRIPTION

The embodiments herein and the various features and advantageous details thereof are explained more fully with reference to the non-limiting embodiments that are illustrated in the accompanying drawings and detailed in the following description. Descriptions of well-known components and processing techniques are omitted so as to not unnecessarily obscure the embodiments herein. The examples used herein are intended merely to facilitate an understanding of ways in which the embodiments herein may be practiced and to further enable those skilled in the art to practice the embodiments herein. Accordingly, the examples should not be construed as limiting the scope of the embodiments herein. As used herein, the terms "a" or "an" are used, as is common in patent documents, include one or more than one. In this document, the term "or" is used to refer to a "nonexclusive or" unless otherwise indicated.

The embodiments herein relate to members discovering other members in the same social network who are in the vicinity by personal attributes such as picture(s), name and location. The personal attributes are stored in users' profiles on the social network server and are associating with each member's unique hardware identification and log-in credentials. Discovering other members would be for the purpose of exchanging personal information, connecting to each other through the social network services and communicating through SMS, E-mail, chat/instant messaging, text, multimedia, or video features that maybe offered by the same social network.

According to one aspect of the embodiments herein, mobile device users sign up or register with a service through website or using their mobile device. For ease of registration, optionally the users can sign up using existing other social network credentials and import pictures from this second social network for the new account creation if this other social network allows porting of users' information and personal attributes such as picture(s) and name. Users may be required to provide additional information if personal attributes such

as picture and name were imported via API from another social network to complete the sign up process. Signing up through a mobile device will require that the user clearly have downloaded the CSA (Client Side Application) from either a depository third party application provider or request from the service website to send to his/her mobile a link allowing the download of the application. Referring now to the drawings, and more particularly to FIGS. **1** through **9**, where similar reference characters denote corresponding features consistently throughout the figures, there are shown preferred embodiments.

FIG. **1** illustrates how communication between mobile users **400** and the server **401** is conducted. FIG. **1** is directed to an arrangement in which a server/computing device **401** communicates bi-directionally with user devices **400** by way of a cellular base transceiver station (BTS) **403** through a standard that also provides separate facilities (not shown) for transmission of digital data. In certain embodiments, communication between the member's mobile devices and the server goes through a BTS **403**, and communicates according to a packet-based telecommunications protocol such as GPRS, 3G, 4G, LTE or any alternative data technology. In FIG. **1**, communication links to/from mobile devices **400** and a network-based server **401** are provided; e.g., internet server, over a BTS **403** using standard communication protocols that provide separate facilities for transmission of digital data, or through wireless connection **404** capable of connecting the user to the internet **405**. As depicted, the mobile devices **400** may communicate through the server **401** to discover other members in the vicinity based on static location provided during sign up or dynamic location obtained from LBS, GPS, or Geolocation standards.

A list of example of services provided to various devices and mobile phones **400** regardless of method of communication used to connect to the server **401** via the internet **405** include registration, view newly created social card/profile, edit profile including adding multiple pictures, obtaining user location dynamically based on standard mobile communication protocols, search for members in vicinity, access additional features provided by social network such as chat/sms view members who discovered the user, accept or reject invitations to connect, and access any features provided by a social network.

The user provides information by filling out an on-line profile through a web based interface or interface provided by the CSA, including uploading graphics or pictures. An example of an electronic generated sign-up screen is shown in FIG. **2**. Additional aspects of the registration process include creating a social card or profile, which is intended to be shared with other users or be discovered by other users. The user's profiles are available for people in the vicinity to view, via a mobile data connection to internet or direct internet connection from the mobile device to local wireless network.

FIG. **2**, with reference to FIG. **1**, depicts an example of a computer or mobile device **100**, and generated display **101** for registering with a service. This service may provide a user with a network-based storage for personal contact information, creation of a custom social card to send to discovered, or discovering, users who are also members of the service, for the purpose of providing personal contact information including personal attributes such as picture(s) to other users and for accessing personal contact information including personal attributes such as picture(s) by of other users of the service. The service may be part of a social network. The registration may offer option to sign up using another social network credentials for ease or registering and authentication. The CSA will obtain a mobile device unique ID upon complete sign up from a mobile device **100** or upon first access from a mobile device **100**.

As mentioned above, the registration process also includes downloading of the CSA, where the CSA resides on the mobile device **100**, and enabled to communicate directly with the service, through a provided internet connection, to synchronize/update contacts and to manage communication with contacts or potential new contacts, access account information via username/password, or phone ID, send search requests for information about users in the vicinity, send invitations, accept, exchange deny requests for exchange of information, obtain instances of the server addresses, allow the user to edit his/her own profile, update photos or information or add additional photos or information, etc. The CSA connects to the server through internet connection provided by the mobile device **100**.

Personal and other user information can also be added by way of the CSA for storage on a server, including hobbies, business associations, or personal information as examples. This and other information can also be added for storage on the server means other than the CSA, such as the user's personal computer, a dedicated kiosk, or other means for accessing the server through the internet. In order to take advantage of the functionalities provided by the service, the member of the service ("member") should have a mobile communication device that provides separate facilities (besides voice transmission) for transmitting digital data. This allows a mobile phone to act like any other computer over the Internet, sending and receiving data via the Internet Protocol.

One format for storing information about a user/member of the service is shown in FIGS. **2** and **3**. Depicted herein are some of the types of user information that may be stored and made accessible to the user at the server. Users may provide personal attributes such as name, address, and a picture. Information about the user's mobile device **100** may include the make, model, and phone number.

FIG. **3**, with reference to FIGS. **1** and **2**, illustrates an example of a database schema/structure **200** for maintaining personal information about a user (member) registered with the service. The information about the member may include, for example, his/her mobile device attributes such as the device key, mobile telecommunications provider; the mobile device type; the member's profile, e.g., name, address, etc.; stored photo(s) of the user; country/state where the member resides; and other information.

The service provided to users may be operated/accessible under a centralized computer system ("server"), which may include but not limited to four components: 1) Graphical user interface, providing an interface to members of the network to sign up, input/edit profile information, etc. 2) A scripting language designed for producing dynamic web pages and mobile language web pages. 3) A comprehensive data base that includes user's information, for example as discussed above and shown in FIG. **1**. Computing capabilities such as calculating proximity of members based on static location information in database or dynamic location info obtained through the CSA.

FIG. **4**, with reference to FIGS. **1** through **3**, is a flowchart depicting a process for registering with the service: Account set up and information provided through a web-based User Interface **101**, e.g., such as shown in FIG. **2**; or mobile device CSA. The user optionally has the flexibility of signing up to the service and import personal attributes including picture, name and additional information by using a second social network credentials. The CSA collects characteristics from the mobile device such as a phone number or IMEI (interna-

tional Mobile Station Equipment Identity) for the purpose of associating the mobile device **400** with a user account maintained at the server **401**. This association between the unique ID such as IMEI, and the user account is used to report the mobile device location to the server dynamically and authenticate user with device used.

To completely utilize the mobile features provided by the service including dynamic search of members in vicinity, the user installs the CSA to the mobile device **400** that in addition to reporting location to the server, enables the user to update, replace, revise the social profile or personal attribute information, modify, hide or publish profile information (at the server) as contained in the user's contact information; e.g., the information contained in the user's profile which may be sent when the user initiates discovery process. Furthermore, the CSA allows the user to indicate interest in connecting with a member, or the user is discovered by others members searches and communicate to other members though features such as SMS, chat, text, and other features.

FIG. **4** illustrates how the server **401** may associate each mobile device **400** with a member account of the service using a unique ID such as IMEI. During the installation process, the server **401** receives from the CSA required Unique ID such as IMEI, or phone number. FIG. **4** is a flowchart associated with the creation of a social card and a user account/profile to initiate the use of the service of discovering others in the vicinity with personal attributes such as pictures and name. As well, it now allows other users to discover the new created account.

The CSA collects unique mobile device ID during the registration to associate with the newly created member profile for future location reporting and authentication for secure and future log in if needed. Once an account is created, the device **400** is not required to be powered on to be discovered. And the last location reported to the server **401** would be considered the current location OR the server **401** may elect to revoke last location reported and identify the user location to be the location provided during sign up as the default location known to the user.

FIG. **5**, with reference to FIGS. **1** through **4**, illustrates a discovery process flowchart where a user connects to the server **401** using the CSA on the mobile device **400** which reports the user location and returns the search results after cross referencing the user location with other members to determine proximity. The server **401** shares with the inquiring user pictures and names and possible profile information so user can select from the list members to connect to.

When a user connects to the server **401** to inquire about other members in the vicinity, the server **401** returns the search results based on proximity and provides personal attributes of all members in the vicinity based on last location known regardless of those reported members are connected at the time to the service or not. Proximity can be a default value set by the server **401** to be within feet or miles, etc. and may allow users to select the value of that proximity for any search inquiry. The user can modify the search to adjust the distance to set parameters for the proximity or even request a search in proximity of a specific point like a convention center or a particular town.

The CSA connection to the server **401** by the device **400** may be used to accomplish three tasks: First, to connect to the service. Second, to provide update on location. Third, to inquire on members in the vicinity based on the current location. FIG. **5** illustrates the discovery of the users using the requesting user's mobile device **400** first to log in and associate the device with the user as well as report the location and initiate a request to discover members in the vicinity. The requesting user's resident CSA receives from the server **401**, as a result, the profiles including pictures of all members in the vicinity.

The server **401**, after receiving an inquiry on members in the vicinity, transmits back to the requesting user mobile device **400** the pictures and names, or other information, for each of the devices in the vicinity, which are then displayed on the inquiring user mobile device screen **410**. The discovery process may thus include the showing of personal or detailed information that a member may wish to have displayed during the initial discovery step, rather than merely a device ID or address, device type, etc. At this point the requesting user has received a list of pictures and names which he/she can now select from the mobile device **400** if further connection is desirable.

In one example, in a first step of the discovery process, a user logs in the service and initiates an inquiry on members in the vicinity. The CSA reports to the server **401** the mobile device's **400** current location based on available cellular location information or IP address if the user is logged to the service via local internet connection. In the second step, the server **401** cross references the location of the user by other users know locations based on static data in the members profiles, and, current dynamic location based on latest reported location update obtained. Once the proximity calculation is complete, the server **401** returns to the first user the results of the search and provides personal attributes including pictures of all members in proximity of the first user.

FIGS. **6** and **7**, with reference to FIGS. **1** through **5**, show in further detail how users may discover each other, in four steps:

Step 1: The user connects to server **401** through an internet capable device belonging to User #1, the CSA reports to server location of the device belonging to User #1 during the log in process, the user then initiates discovery process of members in vicinity by sending an inquiry to the server **401**.

Step 2: The server **401** receives the request from User #1 CSA, the server **401** cross references the user location based on location obtained dynamically or based on the location in the user's profile. Then, the server **401** returns the search results with profiles of members in vicinity including member's social attributes such as pictures and information.

Step 3: The first user reviews the search results and informs the server **401** with his/her interest in connecting to a particular second user (User #2).

If applicable, User #1 may send to User #2 a message/email/sms through the server **401** if the server's facility allows such features to initiate contact.

Step 4: The server **401** informs User #2 of User #1's interest in connecting and/or facilitates a chat feature and delivers the message sent by User #1, and provides User #1 a picture or profile including the picture and personal attributes for User #2 to accept or to decline the invitation to connect/chat.

FIG. **6** is a flowchart for a discovery process between users (User #1 and User #2) where User #1 connects to server **401** through an internet capable device and CSA reports to server location of the connected device. Based on the reported location or location stored in user's profile, the server **401** returns to the User #1 profiles of all users in the vicinity based on proximity with pictures of each user.

If the user (e.g., User #1) elects to connect with any of the suggestions, the user (e.g., User #1) indicates this and the process of informing the other member (e.g., user #2) is managed by the server **401**. No direct contact occurs between users at this point and will not unless the users elect to exchange personal information such as mobile numbers to connect outside of provided service and features. This man-

aged communication by the server **401** insures privacy and allows users to reject connections or terminate conversations without having to worry about direct connections potential issues. The communication between the server **401** and CSA are conducted via a common internet protocol suite which includes an application layer, transport layer, internet layer, and link layer.

FIG. **7** shows a further example of notification to discovered users alerting them to an exchange request. The notification shows the other users' personal attributes including name and picture. FIG. **7** is a flowchart depicting the processing of a user initiating discovery and showing interest to connect to a second user (e.g., User #2) where all communication is managed by the server **401**, according to an embodiment herein. FIG. **7** describes additional aspects of notifications and responses options to requests for exchange of electronics coordinates, personal information or connecting. All communication between users for the purpose of connecting members after the discovery is managed by the server **401**.

User #2 (the discovered user) has the option of accepting the invitation, ignoring/declining or engage in services provided by the server **401** such as chat or sms with or without accepting connection with User #1. Since all communication between members is managed by the server **401**, the server database **401** may store any contact information exchanged and add it through a synchronization method with the CSA as well as keep the history of any conversations/SMS between the members.

The CSA includes feature such as storing edits to profile or communication between the members and synchronizes to the server database **401** for storage once connection between CSA and server **401** is established. This dual storage feature allows the user to restore communication between users on a new device if the device in use is lost or damaged as well as restoring all account information.

In the case where a user switches mobile devices, all the user has to do is to install the CSA on the new device and login with his/her credentials. Once an internet connection is established between the new device CSA and server **401**, and user credentials; the server **401** synchronizes all stored information to the new device, and the new installed CSA reports the new device unique hardware identification.

A server **401** is able to facilitate communication between the two users and may provide additional features such as the ability to chat via SMS or email service and other services as illustrated in FIG. **8**, with reference to FIGS. **1** through **7**. In particular, FIG. **8** illustrates the establishment of the communication between users **908**A, **908**B, such as for example SMS **904**, E-mail **906**, chat/instant messaging, in the form of text or multimedia, video, etc., between consenting users **908**A, **908**B via a server **401** that initiates discovery and consent for the users **908**A, **908**B to exchange data.

The embodiments herein provide a medium for near real-time exchange of contact information, unlike E-mail, SMS or other modes of communication between mobile devices. In this sense the user experience is enhanced over the exchange of E-mail or texting among phones, in at least three ways. First, a requesting device is not limited to conversing with only members that he/she can contact through a known e-mail address, phone number, etc. Second, the exchange may proceed simply by initiating discovery and/or responding to a discovery request. Third, the exchange can occur among multiple members of a service at the same time.

The centralized computer system ("server") **401** may include, or be associated with, an SMS server platform **904** or E-mail platform **906** that provides a corresponding channel of communication between the users **908**A, **908**B. The users **908**A, **908**B are shown communicating directly with one another via SMS platform **904** and/or E-mail platform **906**, facilitated by server **401**.

Members can contact other users, through offered types of communication between them, for example SMS, E-mail, chat/instant messaging, in the form of text or multimedia, video, etc., can also be facilitated. This is depicted in FIG. **9**, with reference to FIGS. **1** through **8**, and which illustrates an arrangement in which a server **401** receives GPS/LBS/RTLS/GEOLOCATION coordinates from users **1004**A, **1004**B, compares these coordinates to determine proximity, and informs the users **1004**A, **1004**B of the proximity.

In FIG. **9**, server **401** is shown receiving GPS coordinates, or LBS or RTLS Location Services information, or Geolocation information, from Users **1004**A and **1004**B, comparing these coordinates to determine proximity, and informing the users of the proximity. Informing one user of another's proximity can be contingent upon consent of the users **1004**A and **1004**B, as obtained above, and can be performed in gradations, for example initially sending limited information of one user to another, then increasing the delivered information and establishing contact depending on consent. In certain embodiments, the participating members **1004**A and **1004**B report their locations to the server **401**, for example periodically, and the server **401** maintains a record of and updates these reported locations, and provides reports to certain users, for examples to those belonging to a common social network. Members' profiles that are connected can be updated to reflect such connection information by the server/computing device **401**.

In certain embodiments, the CSA, residing on the mobile device **400**, may have but is not limited to the following software functionality: authentication and credentials storage capabilities.

An "authentication" portion requests authentication parameters from a user (ID or user login name and password); connects to an instance of server **401**; sends user authorization information to the server side using ID or user name and password; displays a reason for denied access in case of incorrect login; and exits from the software in case of a preset number of incorrect logins; allows a user to change the password; and downloads profile information from the server **401**. The CSA has the ability to store log-in credentials such as user name and password on the device **400** and transfer the credentials to the server **401** for storage in user profile database.

Another form of authentication is to insure that the unique mobile ID obtained and on record is associated with the user's log in credentials and matches user stored information. Optionally, and with user permission, the service may connect to another social network database through APIs, which are application programming interfaces, to access other social network users attributes such as name and picture.

The methods of connecting an application programming interface would differentiate from one social network to another and be proprietary to the respective social networks. An application programming interface (API) is a set of routines, protocols, and tools for building software applications for connecting one network to another network. An API expresses user attributes such as name, picture, and any additional information on the user. The API expresses as well the social network operations, inputs, out-puts, and underlying types.

The embodiments herein recognize the previously listed advancements, while the application fills the gap between locating devices and how to humanize the devices by associ-

ating personal attributes to each device so when a search is done, a face is found rather than a hardware ID number. None of the conventional standards/technologies used to locate mobile devices specified or provided methods allow the ability to associate devices with personal attributes or profiles that include picture and name. Associating personal attributes such as pictures and personal attributes allow users to identify other members and select members whom they wish to exchange contacts with or connect with through the social network.

Certain embodiments herein provide a system and method that allows individuals to use their mobile phones to discover others in the vicinity by personal attributes, such as by photos and name, after which, the two parties can exchange information through the social network via an internet connection bypassing the inherent limitations of same brand devices technology; e.g., security/privacy limitations and compatibility issues that limit or prohibit ad hoc communication.

The system includes a network-linked storage facility that collects information provided by members of the group; e.g., members of the social network, along with personal attributes in a data base hosted by a centralized computer with internet connection. The system associates a member's phone ID to the member's account/profile. The phone association takes place when the user downloads a client-side application which collects, among other things, a unique phone characteristic such as a standard IMEI (International Mobile Station Equipment Identity) or serial number of the mobile device or a unique identifier to associate the member with the account.

According to yet another embodiment, a system for exchanging information among members of a group is provided, such as members of a social network service, and includes an internet based server having a registration portion. After a user has registered online with the service, the server may send the application to the mobile device to download a client-side application into the mobile device. Alternatively, the user may download the CSA from the server or a third party depository offering the service to download the CSA.

A registration process is complete when a user creates a customized social card or profile with the social network, and the user may thereafter see or edit his/her social card on the mobile device or online through a device that connects to the internet. Any changes to the user's card or profile will be updated on both, the server of the social network and the CSA.

Another embodiment provides profiles that can be created by importing some or all information from a separate social network that offers API connections to users' information. This provides ease for registering and authentication to associate the discovery service with another social network that does not or may not offer such a discovery service of members in vicinity.

According to an embodiment herein, the process of discovery and exchange of contact information requires a CSA (Client Side Application) that is installed on the users' mobile devices and can connect users to the service computing device through an internet connection. The CSA functions include but are not limited to, obtaining user credentials for logging into the social network, obtaining unique hardware ID to link to user account, allowing user to edit profile and personal attributes, manage communication with contacts and access features of the service provides such as SMS, text, voice, multimedia and communications with other members.

The vicinity and determination of the proximity is based on either static or dynamic user location. The static location is what the user enters during registration and saved in his/her profile, or obtained through API from another social network if the user elected to sign up to the service with another social network credentials. The dynamic location is a data point entry in the user's profile location which is constantly updated based on information obtained each time the user logs into the social network. The dynamic updated information is obtained through location standards such as GPS, LBS, RTLS or Geolocation services.

The embodiments herein fill a gap left by the existing standards and technologies when it comes to the actual discovery process and exchange of contact information over the internet bypassing ad hoc communication and compatibility and provides personalized way of discovering people by pictures primarily.

According to another embodiment herein, a method for meeting people including discovering people; e.g., viewing their pictures, names, or other personal information, and selecting one or more people to send an invitation to, is provided. The invitation may take the form of a social card, V-Card, or other manner of engaging another person in a social atmosphere like quick SMS or flag that there is interest of connecting, or even a business setting such as a meeting, trade show, conference, etc.

In one aspect, the embodiments herein provide a system and method that enables discovery of others who also desire social interaction, but without being constrained by hardware compatibility issues inherent in mobile devices by different manufacturers. According to this aspect of the embodiments herein, mobile device users (or users) can offer to other, nearby users, their pictures or other information as part of a discovery process, save contacts received from other users, and keep contacts stored on a mobile device up to date by upload/download of personal information through a networked storage capability provided by the computing device; e.g., an internet-linked storage device accessible through a cellular phone network.

For purposes of explanation, the following definitions are adopted. A "requesting user" is the person or person(s) who is connected to the service of the social network through the internet using an internet-enabled mobile device, initiates a discovery process; e.g., search for other members in the vicinity, and a "discovered user" is the person or person(s) belonging to the same social network and may or may not be connected at that time to the service but in the vicinity of the requesting user and his/her personal attributes provided as a result of the initiated inquiry to the requesting user.

In one example, two persons, a requesting user and discovered or discoverable user are members of a social network which allows the members to communicate with each other as part of the social network service. The social network computing device includes a server that stores personal attribute information including static location, capable of obtaining dynamic location data and capable of calculating the proximity of members based on location regardless if it's static or dynamic. A standard discovery process may be initiated by the requesting user for other members in the vicinity. Once the user logs into the service with the mobile device using the CSA (Client Side Application), the computing device obtains location of the user based on LBS, RTLS or Geolocation, etc.

The computing device of the social network cross-references the user's location with registered members in the vicinity of the first user and returns the results by disclosing personal attributes including pictures and names of all members in the vicinity based on proximity location. The user who initiated the inquiry can select from the results returned any discovered user he/she wishes to connect with and send a form of invitation to connect using network available tools

such as email, sms, text or any customized invitation form. The invitation to connect to the inquiring user would include his/her personal attributes including picture and name. The discovered member who received invitation can accept, ignore or decline connecting with the inquiring user.

The communication between requesting and discovered users may then proceed through services provided by the social network computing device, thereby bypassing the limitations of communication over one protocol, network limitation/fees, or devices incompatibility. As an example, one member can be connected to the service of the social network and the computing device through internet service over cellular signal while the other person could be connected to the same service through WiFi® signal that provides internet access.

The computing device can be configured to frequently push updates of a user's contacts to his/her mobile device, and maintain backup of contacts and information of each user. Additionally, the computing device of the social network with the storage service may be configured to initiate an exchange of contact by suggesting to members recommendations on other members to connect with that could be a good fit to the user. The computing device can share with the user personal attributes of other members in the vicinity such as pictures and information of potential matches to connect with. The computing device is capable of cross-referencing members' locations and calculating the distance between members to eliminate members that are not in close proximity or in vicinity of the user conducting the search.

Users have the ability to customize their search proximity calculation by setting the distance and area for search. As an example, a sales person may look for members in the vicinity of 20 miles from him to introduce himself to. Alternatively, a person who is missing a convention in NYC while in California, may start search for members in NYC while he is in California to discover people he wishes to connect with. The recommendations based on vicinity are based on user's static location in a profile or dynamic updated location obtained from user's last log into the service.

According to another aspect of the embodiments herein, a system and method is provided that allows users of the social network, or more generally a database service, to create custom social cards that include social profiles, email information, phone numbers and/or multiple pictures as a personal attribute. In one embodiment, a social card associated with the discovered user may be viewed when a requesting user initiates an inquiry, this unique experience puts a human face on each phone detected during the search rather than an uninteresting Bluetooth® address which is current method of returning search in vicinity now using short range wireless signal.

For instance, the social card may include a picture, a name, location, personalized icons or card designs, etc. Furthermore, the requesting user may receive a plurality of such social cards when there are many members of the service within the short range network or vicinity, or geographic area as defined by the user who is conducting the search.

If the requesting user elects to make contact with one or more of the members discovered in the vicinity, he/she may send an invitation including sharing the requesting user's card or custom profile containing a picture or pictures of the requesting user with a personalized message intended to spark an interest with the discovered user. The discovered user may then respond by accepting a connection, denying or utilize other services provided by the social network such as SMS, chat or email between users.

According to another aspect of the embodiments herein, a method for discovering a person over a type of communication network is provided, and then the method permits communicating with that person over a second type of communication network after initial acceptance; e.g., using a WiFi® network to connect to the internet and discover the person. The first member can then continue communication with the second member later on a cellular phone network that provides data connection to the internet. This means that as long as both members connected to the service via an internet connection, they can communicate regardless of proximity or type of device each member may have or type of method used to connect to the internet.

The server is capable of providing information to members mobile devices phones not capable of exchanging data via Bluetooth® or the related ad hoc network communication protocol, and/or not connected to a cellular phone network via a common cellular phone network provider, or provider plan as long as the device has capability and is connected to the internet.

The method may further include the step of selecting and exchanging information based on pictures received as a result of the promotional message by the service to encourage members to connect to others in the vicinity. The mobile device users are members of a social network service that operates/maintains the server.

According to another embodiment, a server is provided that is capable of providing a communication between a first and second mobile phone user through the server and inform each member that they received message or invitation from others members. Notifications to mobile device users about invitations or messages received can be sent to users by SMS or the CSA notification messaging services.

In certain embodiments, unique member identifiers comprising a Bluetooth® device address, or a WiFi® address, or a main component address such as IMEI, which is the international mobile station equipment identifier, is associated with the device and member login credentials; and are stored on the server associated with the user's profile/social card.

This authentication is important so when a search is conducted on a mobile device and hardware ID is returned as search results from standard protocols, the embodiments herein associate a profile with the unique ID and returns the search results in the form of personal attributes such as picture and name. Additional advantages are detailed later for authentication with devices, retrievals of account on new devices and more. The system provided by the embodiments herein does not require that discoverable members have their respective devices turned on at the time of the search conducted by the first user or connected at the time to the service through internet connection. Thus, the server returns the search results of all members in the vicinity based on their location and proximity to the first user based on stored static locations and the latest dynamic location known and stored on the server.

The foregoing description of the specific embodiments will so fully reveal the general nature of the embodiments herein that others can, by applying current knowledge, readily modify and/or adapt for various applications such specific embodiments without departing from the generic concept, and, therefore, such adaptations and modifications should and are intended to be comprehended within the meaning and range of equivalents of the disclosed embodiments. It is to be understood that the phraseology or terminology employed herein is for the purpose of description and not of limitation.

What is claimed is:

1. A system comprising:

a computing device configured to communicate with various mobile and terminal devices to manage introduction and connection of members belonging to a same network by sharing personal attributes between members such as picture(s) and name, wherein said computing device associates unique hardware identification of member devices and login credentials with member profiles and via a search process returns searches of members for others in a vicinity or in proximity thereto, and with personal attributes comprising pictures and names bringing an image of a human face to a device allocation in said search process; and

a first user using a respective first mobile communications device and a second user using a respective second mobile communications device each capable of connecting to the internet through any of a mobile telecommunications provider network and a local area wireless network,

wherein said computing device being in communication with the first and second mobile communication devices through internet connection via an application installed on the respective first and second mobile communication devices of the users, and configured to provide access to stored user profile information about said first user and said second user, respectively, including personal attributes comprising picture(s), a name, information, and a location,

wherein said computing device is configured to store static locations of members and receive information identifying current dynamic locations of all members based on real time location reporting from a client side application,

wherein said computing device is configured to calculate and determine a proximity of user locations based on any of a static and a dynamic location of the members which are updated on a profile database of said members,

wherein said computing device is configured to send to said first user upon inquiring of other members in the vicinity of said first user, personal attributes of all other members based on proximity calculations to select members that said first user may wish to connect with, and to send to said second mobile communication device an invitation on behalf of said first user and including first user personal attributes for said second user to accept connecting with said first user,

wherein said computing device is configured to connect said first user and said second user through a members-only-social-network communication tools between said first user and said second user, wherein said communication tools comprise any of SMS, E-mail, chat/instant messaging, multimedia, voice, and video, and

wherein said computing device is configured to locate information about said second user from a social network storage file of said second user, and transmit this information to said first mobile communications device for further information beyond first introductory attributes such as picture and name only.

2. The system of claim 1, wherein the first and second users are members of a same social network, and wherein said computing device is operable to disclose social network attributes of said first and second users in the vicinity or within a particular distance from one another for connecting members.

3. The system of claim 1, wherein said computing device is configured to receive customized parameters from said first user on a search vicinity scope and a customized selection of a start point other than a current user location.

4. The system of claim 2, wherein said computing device is operable to provide any user with said social network attributes of all members in said social network in the vicinity or in proximity thereto.

5. The system of claim 2, wherein said computing device is configured to receive an inquiry from said first user regarding members in proximity to a first user location.

6. The system of claim 2, wherein said computing device is configured to recommend to members other members in the vicinity to connect with to promote social interaction.

7. The system of claim 2, wherein said computing device is configured to report to said first user social network attributes of all members of said social network who are in proximity to said first user.

8. The system of claim 7, wherein said computing device is configured to receive from said first user a selection of one or more additional users with whom said first user wishes to connect with through said social network.

9. The system of claim 7, wherein said computing device is configured to send to said first user further social attributes of one or more of selected additional users beyond the picture and name used in the introductory search results.

10. The system of claim 2, wherein said computing device is configured to obtain permission of a selected user prior to revealing further information beyond an introductory picture and name when a user preference is set for such a permission requirement.

11. The system of claim 1, wherein said computing device is configured to update profile information to indicate that the first and second users are connected.

12. The system of claim 2, wherein said computing device is configured to update profile information to indicate that the first and second users are connected.

13. The system of claim 2, wherein said computing device is configured to store communication between members and synchronize saved communication on a client side application used on devices for communication.

14. The system of claim 1, wherein said computing device is configured to assess a proximity of users to one another based on any of a static location information in a user profile and updated location indicators of a user dynamic location.

15. The system of claim 14, wherein updated location indicators are based on user location information reported to said computing device by any of mobile device real time location reporting technology and internet protocol address location information and saved to profiles of users.

16. The system of claim 1, wherein said computing device permits discoverable members to have their respective devices turned on or turned off at a time of a search being conducted by said first user, wherein said computing device permits said discoverable members to have their respective devices unconnected to an internet connection service at said time of the search being conducted by said first user, and wherein any of turned off devices and disconnected devices is discoverable by said computer device as said internet connection service is configured to report said any of turned off devices and disconnected devices as discoverable based on a latest static and dynamic location in proximity to said first user.

17. A method comprising:

using a computing device to communicate with various mobile and terminal devices to manage introduction and connection of members belonging to a same network by sharing personal attributes between members such as picture(s) and name, wherein said computing device

associates unique hardware identification of member devices and login credentials with member profiles and via a search process returns searches of members for others in a vicinity or in proximity thereto, and with personal attributes comprising pictures and names bringing an image of a human face to a device allocation in said search process;

providing a first user using a respective first mobile communications device and a second user using a respective second mobile communications device each capable of connecting to the internet through any of a mobile telecommunications provider network and a local area wireless network;

using said computing device to be in communication with the first and second mobile communication devices through internet connection via an application installed on the respective first and second mobile communication devices of the users, and to provide access to stored user profile information about said first user and said second user, respectively, including personal attributes comprising picture(s), a name, information, and a location;

using said computing device to store static locations of members and receive information identifying current dynamic locations of all members based on real time location reporting from a client side application;

using said computing device to calculate and determine a proximity of user locations based on any of a static and a dynamic location of the members which are updated on a profile database of said members;

using said computing device to send to said first user upon inquiring of other members in the vicinity of said first user, personal attributes of all other members based on proximity calculations to select members that said first user may wish to connect with, and to send to said second mobile communication device an invitation on behalf of said first user and including first user personal attributes for said second user to accept connecting with said first user;

using said computing device to connect said first user and said second user through a members-only-social-network communication tools between said first user and said second user, wherein said communication tools comprise any of SMS, E-mail, chat/instant messaging, multimedia, voice, and video; and

using said computing device to locate information about said second user from a social network storage file of said second user, and transmit this information to said first mobile communications device for further information beyond first introductory attributes such as picture and name only.

18. The method of claim **17**, wherein the first and second users are members of a same social network, and wherein said method further comprises using said computing device to disclose social network attributes of said first and second users in the vicinity or within a particular distance from one another for connecting members.

19. The method of claim **17**, further comprising using said computing device to receive customized parameters from said first user on a search vicinity scope and a customized selection of a start point other than a current user location.

20. The method of claim **18**, further comprising using said computing device to provide any user with said social network attributes of all members in said social network in the vicinity or in proximity thereto.

21. The method of claim **18**, further comprising using said computing device to receive an inquiry from said first user regarding members in proximity to a first user location.

22. The method of claim **18**, further comprising using said computing device to recommend to members other members in the vicinity to connect with to promote social interaction.

23. The method of claim **18**, further comprising using said computing device to report to said first user social network attributes of all members of said social network who are in proximity to said first user.

24. The method of claim **23**, further comprising using said computing device to receive from said first user a selection of one or more additional users with whom said first user wishes to connect with through said social network.

25. The method of claim **23**, further comprising using said computing device to send to said first user further social attributes of one or more of selected additional users beyond the picture and name used in the introductory search results.

26. The method of claim **18**, further comprising using said computing device to obtain permission of a selected user prior to revealing further information beyond an introductory picture and name when a user preference is set for such a permission requirement.

27. The method of claim **17**, further comprising using said computing device to update profile information to indicate that the first and second users are connected.

28. The method of claim **18**, further comprising using said computing device to update profile information to indicate that the first and second users are connected.

29. The method of claim **18**, further comprising using said computing device to store communication between members and synchronize saved communication on a client side application used on devices for communication.

30. The method of claim **17**, further comprising using said computing device to assess a proximity of users to one another based on any of a static location information in a user profile and updated location indicators of a user dynamic location.

31. The method of claim **30**, wherein updated location indicators are based on user location information reported to said computing device by any of mobile device real time location reporting technology and internet protocol address location information and saved to profiles of users.

32. The method of claim **17**, further comprising:

using said computing device to permit discoverable members to have their respective devices turned on or turned off at a time of a search being conducted by said first user; and

using said computing device to permit said discoverable members to have their respective devices unconnected to an internet connection service at said time of the search being conducted by said first user,

wherein any of turned off devices and disconnected devices is discoverable by said computer device as said internet connection service is configured to report said any of turned off devices and disconnected devices as discoverable based on a latest static and dynamic location in proximity to said first user.

* * * * *

US010321267B2

(12) **United States Patent**
Alharayeri

(10) **Patent No.: US 10,321,267 B2**
(45) **Date of Patent: *Jun. 11, 2019**

(54) **LOCATION-BASED DISCOVERY OF NETWORK MEMBERS**

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(72) Inventor: **Ramzi Alharayeri**, San Jose, CA (US)

(73) Assignee: **WIRELESS DISCOVERY LLC**, Los Gatos, CA (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 404 days.

This patent is subject to a terminal disclaimer.

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(65) **Prior Publication Data**

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(Continued)

(51) **Int. Cl.**
H04W 24/00 (2009.01)
H04W 4/02 (2018.01)
(Continued)

(52) **U.S. Cl.**
CPC ***H04W 4/023*** (2013.01); ***G06F 16/275*** (2019.01); ***G06F 16/29*** (2019.01); ***H04L 51/00*** (2013.01);
(Continued)

(58) **Field of Classification Search**
CPC H04W 4/02; H04W 4/12; H04W 8/18; H04W 48/04; H04W 64/00; H04W 88/06
(Continued)

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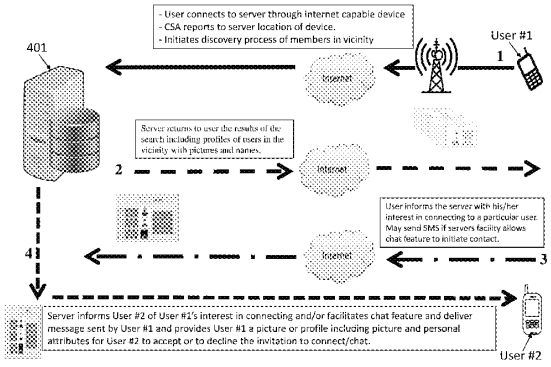
Primary Examiner — Anthony S Addy
Assistant Examiner — Matthew W Genack
(74) *Attorney, Agent, or Firm* — Rahman LLC

(57) **ABSTRACT**

A technique for allowing members of the same social network using mobile devices to discover others in the vicinity by personal attributes and in specific picture(s) and name for the purpose of connecting, and the ability to use functions provided by a social network such as SMS, e-mail, chat/instant messaging, multimedia, or video by using unique hardware identification of each member mobile device and personal login information that are stored in a network server computing device; and associating the unique apparatus of the members' hardware with the members' personal profile such that when a search is initiated between members, the results contain the members' profile's picture(s), name, location and additional information as stored in the profiles. The proximity of the users is determined by static or dynamic location of the actual device location identified through mobile radio frequency location
(Continued)



technology and internet IP information and saved in the user profile.

18 Claims, 9 Drawing Sheets

Related U.S. Application Data

is a continuation-in-part of application No. 14/570,779, filed on Dec. 15, 2014, now Pat. No. 9,264,875, which is a continuation-in-part of application No. 12/351,654, filed on Jan. 9, 2009, now Pat. No. 8,914,024.

(60) Provisional application No. 61/010,891, filed on Jan. 10, 2008.

(51) **Int. Cl.**

H04L 29/08	(2006.01)
H04L 12/58	(2006.01)
H04W 4/21	(2018.01)
G06F 16/29	(2019.01)
G06F 16/27	(2019.01)
H04W 4/08	(2009.01)
H04W 8/18	(2009.01)
H04L 29/12	(2006.01)
H04W 84/18	(2009.01)

(52) **U.S. Cl.**

CPC ***H04L 51/20*** (2013.01); ***H04L 51/32*** (2013.01); ***H04L 51/36*** (2013.01); ***H04L 51/38*** (2013.01); ***H04L 67/28*** (2013.01); ***H04L 67/306*** (2013.01); ***H04W 4/08*** (2013.01); ***H04W 4/21*** (2018.02); ***H04W 8/18*** (2013.01); *H04L 61/1594* (2013.01); *H04W 84/18* (2013.01)

(58) **Field of Classification Search**

USPC 455/412.1–412.2, 426.1, 432.3, 455/456.1–456.6, 457

See application file for complete search history.

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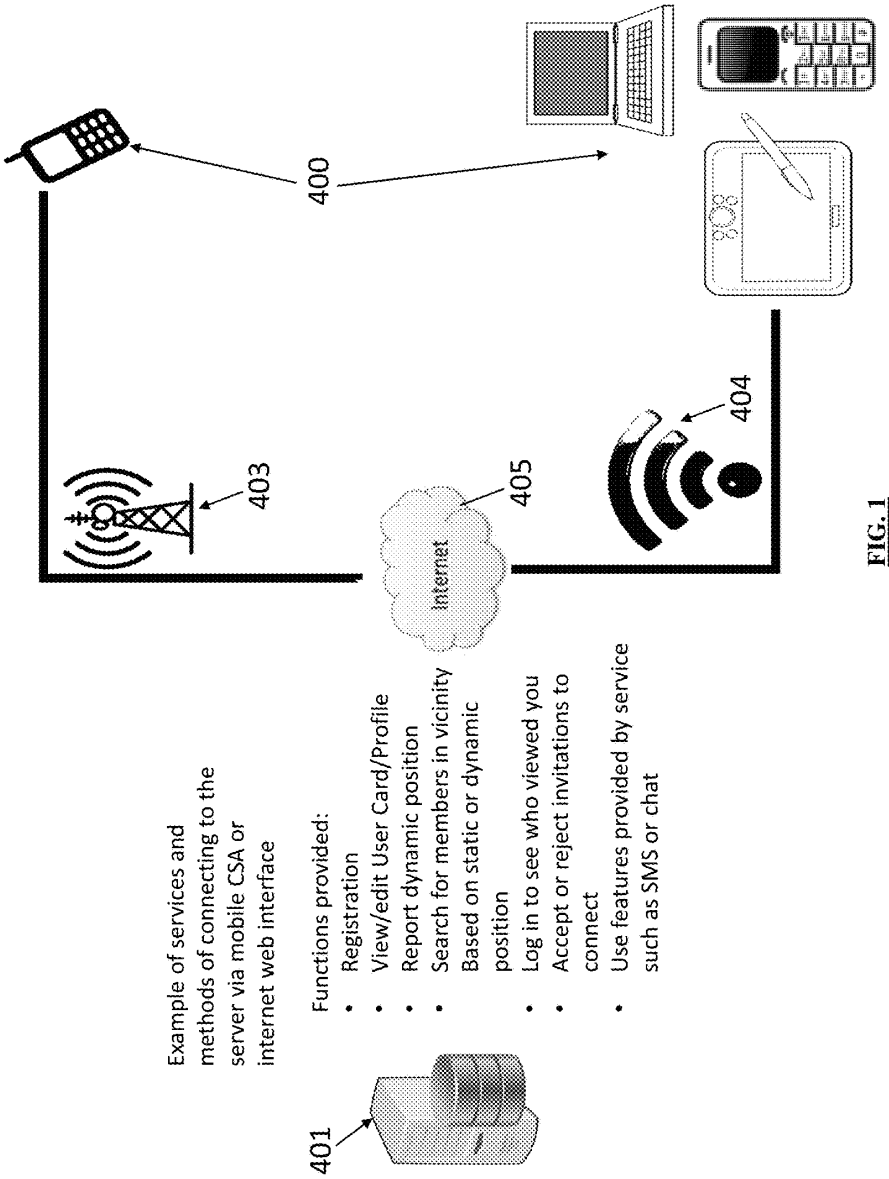

400
403
405
Internet
404
401
Example of services and methods of connecting to the server via mobile CSA or internet web interface
Functions provided:
• Registration
• View/edit User Card/Profile
• Report dynamic position
• Search for members in vicinity Based on static or dynamic position
• Log in to see who viewed you
• Accept or reject invitations to connect
• Use features provided by service such as SMS or chat

FIG. 1

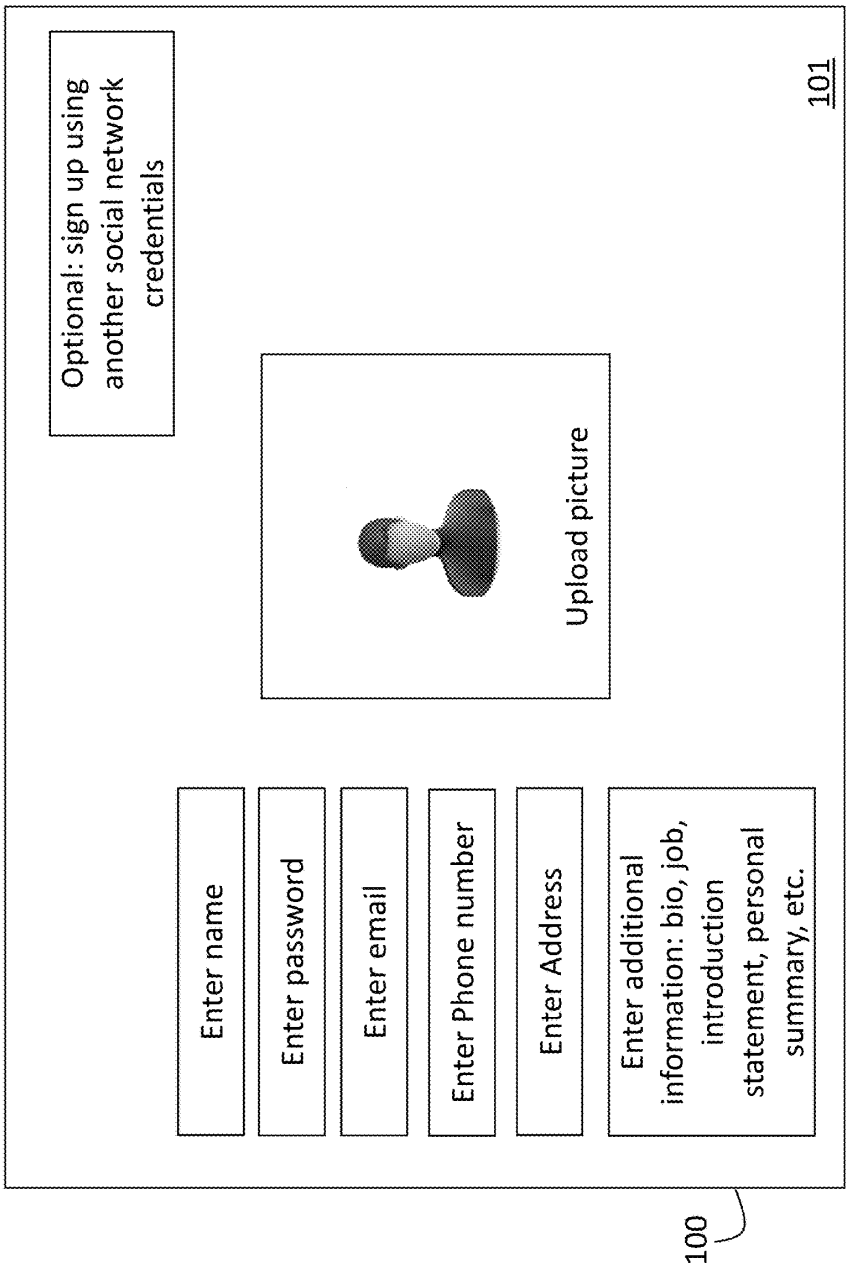

Optional: sign up using another social network credentials
Upload picture
Enter name
Enter password
Enter email
Enter Phone number
Enter Address
Enter additional information: bio, job, introduction statement, personal summary, etc.
101
100

FIG. 2

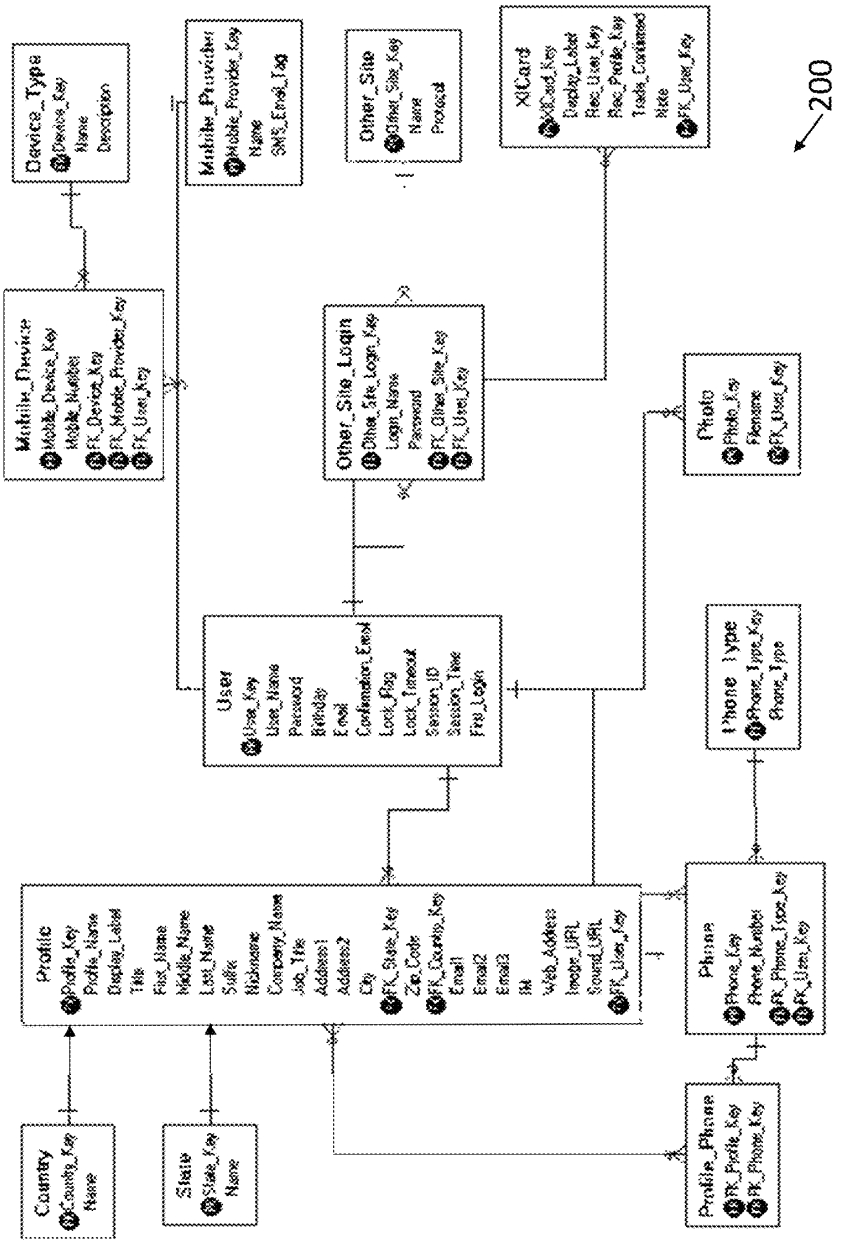

200
Device_Type
Device_Key
Name
Description
Mobile_Provider
Mobile_Provide_Key
Name
SMS_Email_Tag
Other_Site
Other_Site_Key
Name
Protocol
XCard
XCard_Key
Display_Label
Rec_User_Key
Rec_Profile_Key
Trade_Contained
Note
FK_User_Key
Mobile_Device
Mobile_Device_Key
Mobile_Number
FK_Device_Key
FK_Mobile_Provide_Key
FK_User_Key
Other_Site_Login
Other_Site_Login_Key
Login_Name
Password
FK_Other_Site_Key
FK_User_Key
Photo
Photo_Key
Filename
FK_User_Key
User
User_Key
User_Name
Password
Birthday
Email
Confirmation_Email
Lock_Flag
Lock_Timeout
Session_ID
Session_Time
First_Login
Phone_Type
Phone_Type_Key
Phone_Type
Profile
Profile_Key
Profile_Name
Display_Label
Title
First_Name
Middle_Name
Last_Name
Suffix
Nickname
Company_Name
Job_Title
Address1
Address2
City
FK_State_Key
Zip_Code
FK_Country_Key
Email
Email2
Email3
IM
Web_Address
Image_URL
Sound_URL
FK_User_Key
Phone
Phone_Key
Phone_Number
FK_Phone_Type_Key
FK_User_Key
Country
Country_Key
Name
State
State_Key
Name
Profile_Phone
FK_Profile_Key
FK_Phone_Key

FIG. 3

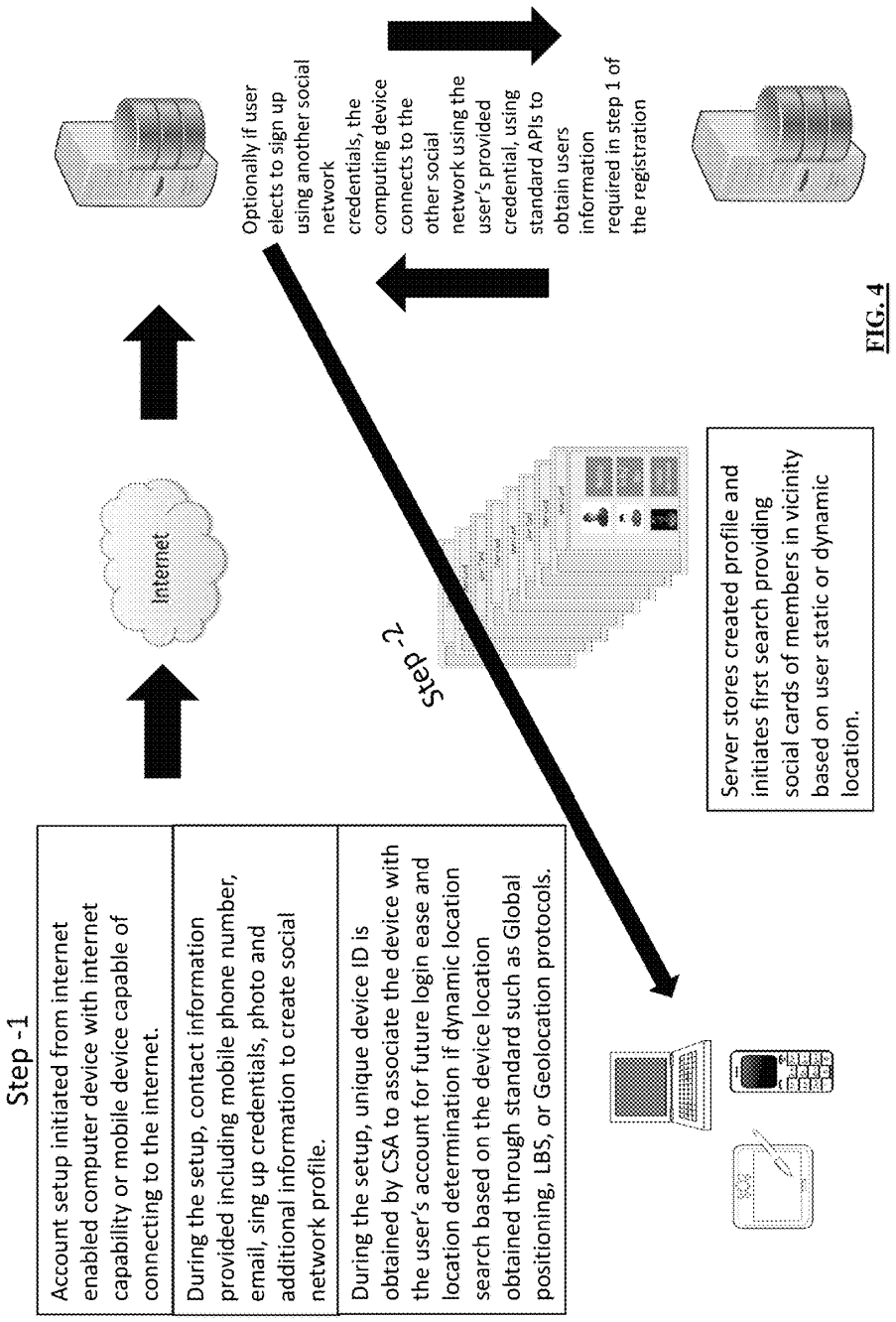
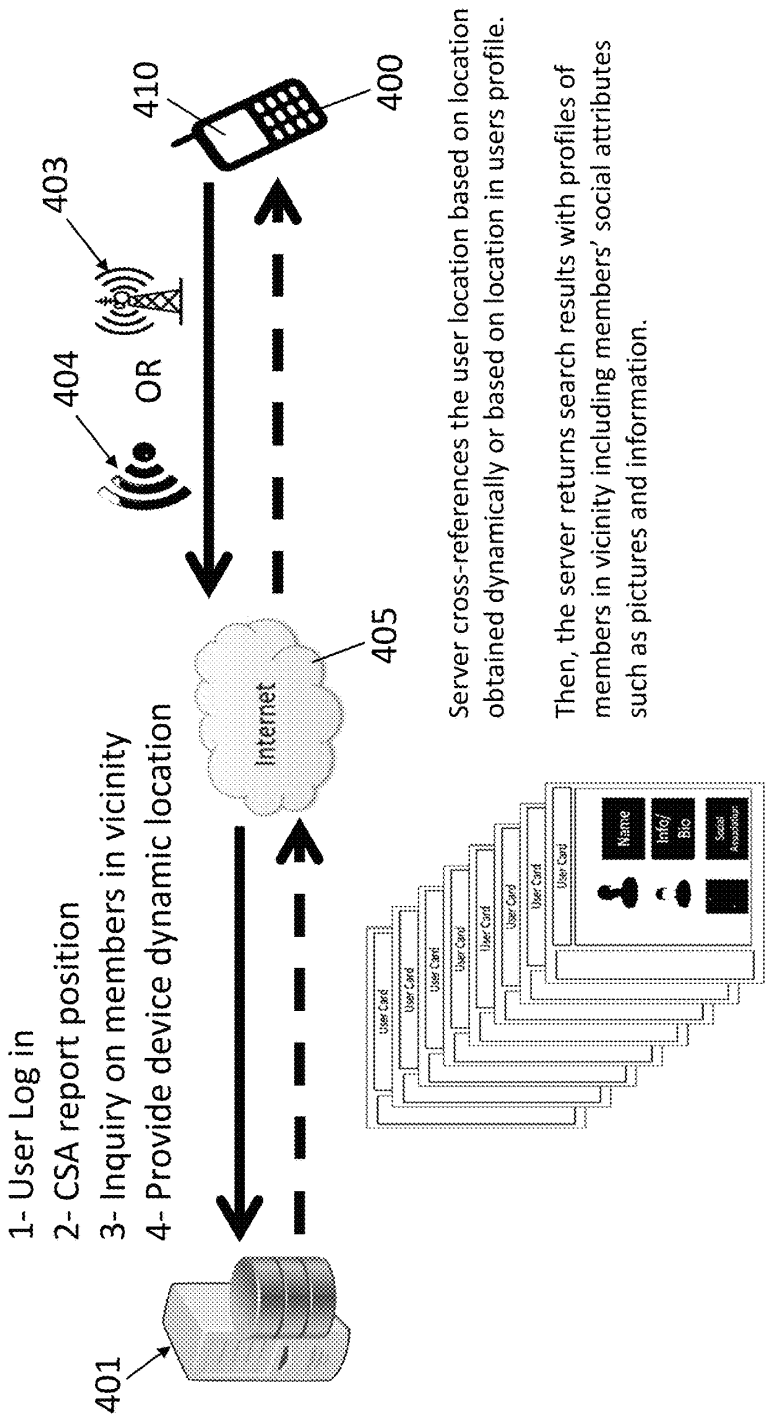

Step -1
Account setup initiated from internet enabled computer device with internet capability or mobile device capable of connecting to the internet.
During the setup, contact information provided including mobile phone number, email, sing up credentials, photo and additional information to create social network profile.
During the setup, unique device ID is obtained by CSA to associate the device with the user's account for future login ease and location determination if dynamic location search based on the device location obtained through standard such as Global positioning, LBS, or Geolocation protocols.
Internet
Step -2
Server stores created profile and initiates first search providing social cards of members in vicinity based on user static or dynamic location.
Optionally if user elects to sign up using another social network credentials, the computing device connects to the other social network using the user's provided credential, using standard APIs to obtain users information required in step 1 of the registration

FIG. 4


400
410
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404
OR
405
Internet
401
1- User Log in
2- CSA report position
3- Inquiry on members in vicinity
4- Provide device dynamic location
Server cross-references the user location based on location obtained dynamically or based on location in users profile.
Then, the server returns search results with profiles of members in vicinity including members' social attributes such as pictures and information.
User Card
Name
Info/ Bio
Social Association

FIG. 5

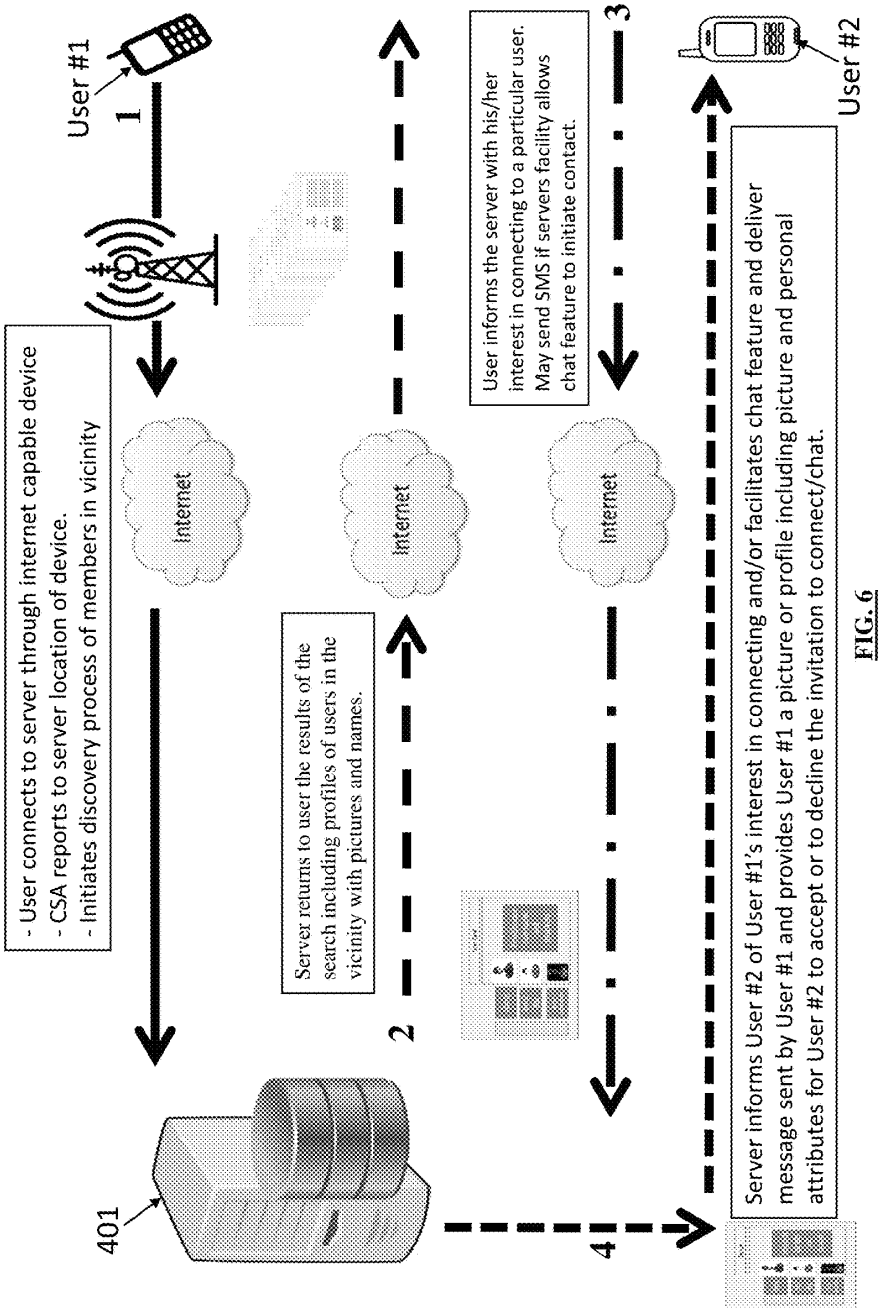
User #1
1
- User connects to server through internet capable device
- CSA reports to server location of device.
- Initiates discovery process of members in vicinity
Internet
2
Server returns to user the results of the search including profiles of users in the vicinity with pictures and names.
Internet
3
User informs the server with his/her interest in connecting to a particular user. May send SMS if servers facility allows chat feature to initiate contact.
Internet
4
Server informs User #2 of User #1's interest in connecting and/or facilitates chat feature and deliver message sent by User #1 and provides User #1 a picture or profile including picture and personal attributes for User #2 to accept or to decline the invitation to connect/chat.
User #2
401

FIG. 6

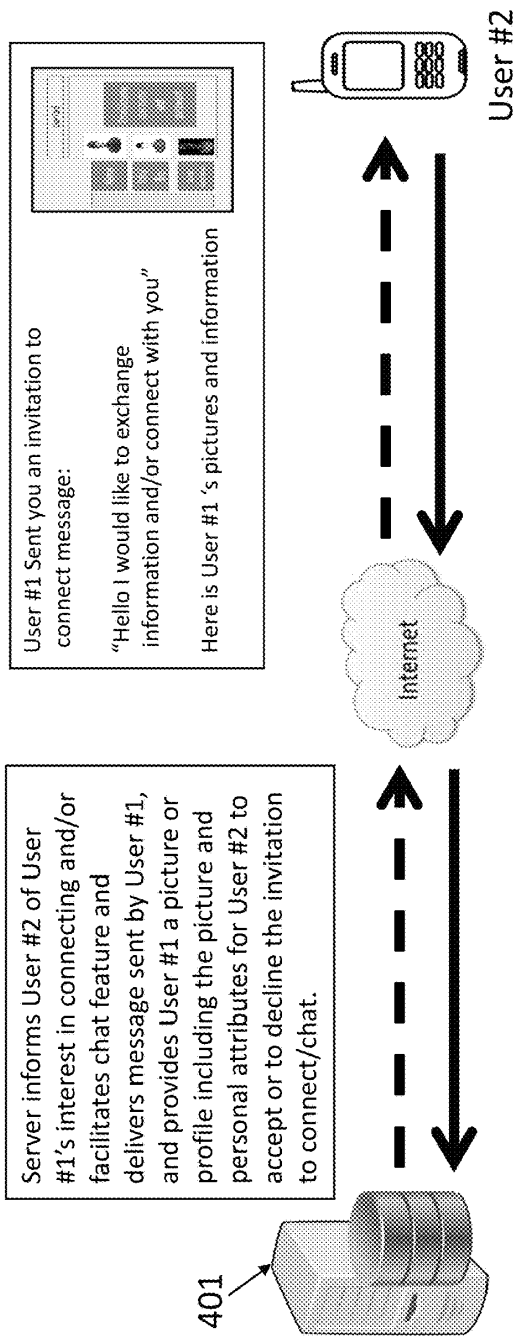
User #1 Sent you an invitation to connect message:
"Hello I would like to exchange information and/or connect with you"
Here is User #1 's pictures and information
User #2
Internet
Server informs User #2 of User #1's interest in connecting and/or facilitates chat feature and delivers message sent by User #1, and provides User #1 a picture or profile including the picture and personal attributes for User #2 to accept or to decline the invitation to connect/chat.
401
User #2 options:
1- Ignore invitation
2- Accept invitation and informs server of acceptance so members are now connected through a social network and are able to exchange further information or use features provided to connected members.
3- Replying to the SMS/chat feature indicating acceptance or request further information before accepting invitation.

FIG. 7

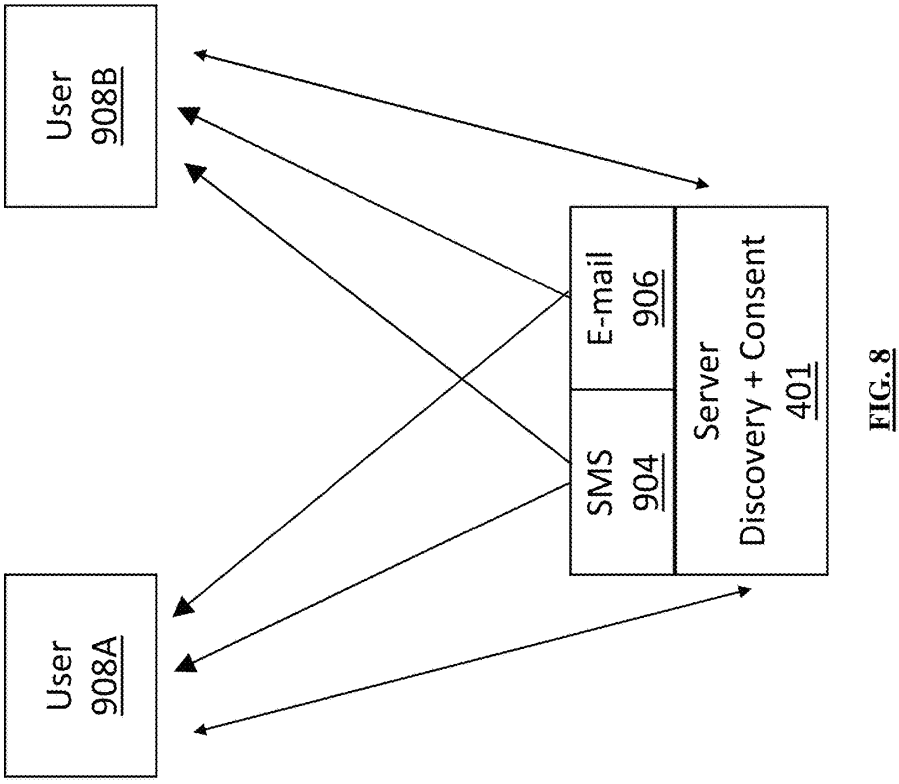
User 908B
User 908A
E-mail 906
SMS 904
Server Discovery + Consent 401

FIG. 8

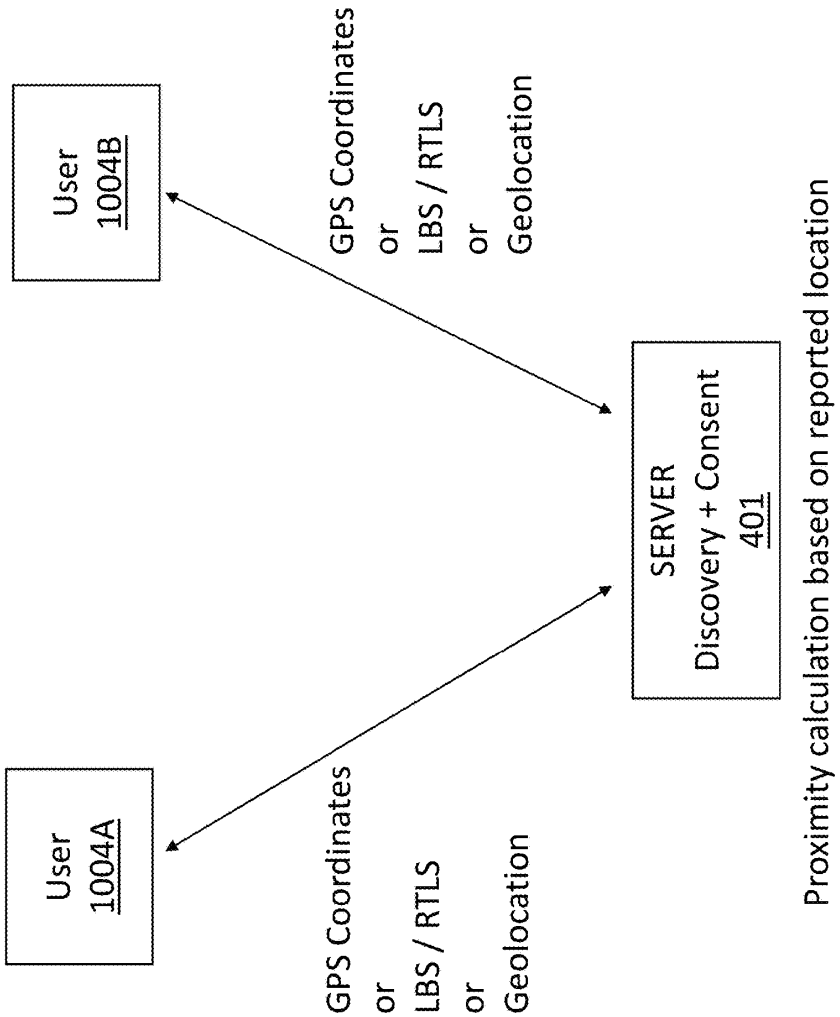
User
1004B
GPS Coordinates
or
LBS / RTLS
or
Geolocation
SERVER
Discovery + Consent
401
User
1004A
GPS Coordinates
or
LBS / RTLS
or
Geolocation
Proximity calculation based on reported location

FIG. 9

LOCATION-BASED DISCOVERY OF NETWORK MEMBERS

CROSS-REFERENCE TO RELATED APPLICATIONS

This application is a continuation of U.S. application Ser. No. 15/000,960, filed on Jan. 19, 2016, which is a continuation-in-part of U.S. application Ser. No. 14/570,779, filed on Dec. 15, 2014, now U.S. Pat. No. 9,264,875, issued on Feb. 16, 2016, which is a continuation-in-part of U.S. application Ser. No. 12/351,654, filed on Jan. 9, 2009, now U.S. Pat. No. 8,914,024, issued on Dec. 16, 2014, which claims benefit to U.S. Provisional Application No. 61/010,891 filed on Jan. 10, 2008, the complete disclosures of which, in their entireties, are herein incorporated by reference.

BACKGROUND

Technical Field

The embodiments herein generally relate to communication systems, and more particularly to device connectivity in a communications network.

Description of the Related Art

In light of the explosive use of mobile devices, social networks and email addresses, individuals are in need of the ability to exchange customized information such as pictures, social network profiles, emails and phone numbers using their mobile devices. There are methods to exchange contact information in the form of virtual cards (Vcards). However, there is generally no form of communication using mobile devices that allows discovery by personal attributes for the purpose of exchanging contact information. Furthermore, generally there is no available technology adapted allowing mobile device users to easily exchange contacts and/or related personal information over the internet for the purpose of social interaction by way of mobile devices without limitations to hardware brands.

Available methods for contact information exchange do not typically provide discovery by attributes. Rather, these methods assign pin numbers to individuals or offer discovery by a mobile class or mobile ID. Typically, these systems require a user to operate under a common telecommunication service provider operated network. Other methods are based on Bluetooth® technology in an ad hoc mode between two devices. These methods usually work only on the same brand mobile devices due to Bluetooth® technology limitations, compatibility and security issues.

In recent years, social networks began collaboration and establishment of an API protocol which stands for Application Programming Interface that allows for social networks to connect to each other with given permission from the user, to import data or pictures from one social network to another. Yet no method generally allows members of various social networks to interexchange contact information, or offer third party solution dedicated to members connecting with others whom are not known to members based on the vicinity and common interest.

Communication between two Bluetooth-enabled devices typically requires entering a passkey or security code to allow pairing or communication between any two devices. This desire for maintaining security/privacy, inherent in the design of existing Bluetooth-enabled devices, such as a Smartphone, has imposed undesirable limitations on mobile device users who wish to interact with each other in a social setting.

Other alternatives available for contact information exchange such as Beam technology permit the exchange to take place between similar mobile devices using an infrared signal. This particular solution is, however, limited. For example, it requires a line-of-sight between the devices and does not offer the ability to exchange information such as pictures as a personal attribute and limits the use to a similar brand of hardware transmitting in an ad hoc mode.

U.S. Pat. Nos. 6,868,451; 7,249,182; 7,440,746; 7,450,996; and 7,454,004, the complete disclosures of which, in their entireties, are herein incorporated by reference, focus on contact information storage, retrieval, Bluetooth® technology methods of profiles and exchange of contact information.

Additionally, there has been advanced ability to precisely determine mobile devices locations but all the standards in place are geared towards identifying devices locations as instruments. There are no human face associated with the searches in those standards and no links to social networks. They are simply industry standards without connection to exploding applications and methods of mobile devices use.

Multiple advanced technologies have been added to the mobile phone industry by International Organizations for Standards to provide accurate dynamic reporting of the mobile devices. Some of the standards adopted are: LBS (Location Based Service) based on GPS (Global local positioning), RTLS Real-Time Locating System, as noted in ISO/IEC 19762-5 and ISO/IEC 24730-1 and Geolocation which is also the latitude and longitude coordinates of a particular location. Geolocation uses radio Frequency RF location, TDOA (Time Difference Of Arrival), information from cell towers to triangulate the approximate position, and Internet Protocol (IP) address among other information to determine the exact address of a mobile device or terminal connected to the internet. The terms and definitions are standardized by ISO/IEC 19762-5:2008.

SUMMARY

In view of the foregoing, an embodiment herein provides a system comprising a computing device configured to communicate with various mobile and terminal devices to manage introduction and connection of members belonging to a same network by sharing personal attributes between members; a first mobile communications device communicatively linked to the computing device; and a second mobile communications device communicatively linked to the computing device, wherein the computing device provides access to stored user profile information about a first user and a second user, wherein the computing device is configured to store static locations of members and receive information identifying current dynamic locations of all members in the network, wherein the computing device is configured to calculate and determine a proximity of user locations, wherein the computing device is configured to send to the first user upon inquiring of other members in the network of the first user, personal attributes of all other members based on proximity calculations to select members that the first user may wish to connect with, and to send to the second mobile communication device an invitation on behalf of the first user for the second user to accept connecting with the first user, wherein the computing device is configured to communicatively connect the first user and the second user, and wherein the computing device is configured to locate information about the second user from a social network storage file of the second user, and transmit this information to the first mobile communications device.

The computing device may be operable to disclose social network attributes of the first and second users for connecting members. The computing device may be configured to report to the first user social network attributes of all members of a social network who are in proximity to the first user. The computing device may be configured to receive from the first user a selection of one or more additional users with whom the first user wishes to connect with through a social network. The computing device may be configured to send to the first user social attributes of one or more of selected additional users. The computing device may be configured to update profile information to indicate that the first and second users are connected. The computing device may be configured to store communication between members and synchronize saved communication on a client side application used on devices for communication. The computing device may be configured to assess a proximity of users to one another based on any of a static location information in a user profile and updated location indicators of a user dynamic location. Updated location indicators may be based on user location information reported to the computing device. The computing device may permit discoverable members to have their respective devices turned on or turned off at a time of a search being conducted by the first user, wherein the computing device may permit the discoverable members to have their respective devices unconnected to an internet connection service at the time of the search being conducted by the first user, and wherein any of turned off devices and disconnected devices may be discoverable by the computer device as the internet connection service is configured to report the any of turned off devices and disconnected devices as discoverable based on a latest static and dynamic location in proximity to the first user.

Another embodiment provides a method comprising using a computing device to communicate with various mobile and terminal devices to manage introduction and connection of members belonging to a same network by sharing personal attributes between members; communicatively linking a first mobile communications device to the computing device; communicatively linking a second mobile communications device to the computing device; using the computing device to provide access to stored user profile information about a first user and a second user; using the computing device to store static locations of members and receive information identifying current dynamic locations of all members in the network; using the computing device to calculate and determine a proximity of user locations; using the computing device to send to the first user upon inquiring of other members in the network of the first user, personal attributes of all other members based on proximity calculations to select members that the first user may wish to connect with, and to send to the second mobile communication device an invitation on behalf of the first user for the second user to accept connecting with the first user; using the computing device to communicatively connect the first user and the second user; and using the computing device to locate information about the second user from a social network storage file of the second user, and transmit this information to the first mobile communications device.

The method may further comprise using the computing device to disclose social network attributes of the first and second users for connecting members. The method may further comprise using the computing device to report to the first user social network attributes of all members of a social network who are in proximity to the first user. The method may further comprise using the computing device to receive

from the first user a selection of one or more additional users with whom the first user wishes to connect with through a social network. The method may further comprise using the computing device to send to the first user social attributes of one or more of selected additional users. The method may further comprise using the computing device to update profile information to indicate that the first and second users are connected. The method may further comprise using the computing device to store communication between members and synchronize saved communication on a client side application used on devices for communication. The method may further comprise using the computing device to assess a proximity of users to one another based on any of a static location information in a user profile and updated location indicators of a user dynamic location. The updated location indicators may be based on user location information reported to the computing device. The method may further comprise using the computing device to permit discoverable members to have their respective devices turned on or turned off at a time of a search being conducted by the first user; and using the computing device to permit the discoverable members to have their respective devices unconnected to an internet connection service at the time of the search being conducted by the first user, wherein any of turned off devices and disconnected devices may be discoverable by the computer device as the internet connection service is configured to report the any of turned off devices and disconnected devices as discoverable based on a latest static and dynamic location in proximity to the first user.

These and other aspects of the embodiments herein will be better appreciated and understood when considered in conjunction with the following description and the accompanying drawings. It should be understood, however, that the following descriptions, while indicating preferred embodiments and numerous specific details thereof, are given by way of illustration and not of limitation. Many changes and modifications may be made within the scope of the embodiments herein without departing from the spirit thereof, and the embodiments herein include all such modifications.

BRIEF DESCRIPTION OF THE DRAWINGS

The embodiments herein will be better understood from the following detailed description with reference to the drawings, in which:

FIG. **1** illustrates communication links to/from mobile devices and a network-based server; according to an embodiment herein;

FIG. **2** illustrates an example of a computer or mobile device, and a generated display for registering with a service, according to an embodiment herein;

FIG. **3** illustrates an example of a database schema/structure for maintaining personal information about a user (member) registered with the service, according to an embodiment herein;

FIG. **4** is a flowchart associated with the creation of a social card and a user account/profile to initiate the use of the service of discovering others in the vicinity with personal attributes such as pictures and names, according to an embodiment herein;

FIG. **5** illustrates a discovery process flowchart, according to an embodiment herein;

FIG. **6** is a flowchart for a discovery process between users, according to an embodiment herein;

FIG. **7** is a flowchart depicting the processing of a user initiating discovery and showing interest to connect to a

second user where all communication is managed by the server, according to an embodiment herein;

FIG. **8** illustrates the establishment of the communication between users, according to an embodiment herein; and

FIG. **9** illustrates an arrangement in which a server receives GPS/LBS/GEOLOCATION coordinates from users, compares these coordinates to determine proximity, and informs the users of the proximity, according to an embodiment herein.

DETAILED DESCRIPTION

The embodiments herein and the various features and advantageous details thereof are explained more fully with reference to the non-limiting embodiments that are illustrated in the accompanying drawings and detailed in the following description. Descriptions of well-known components and processing techniques are omitted so as to not unnecessarily obscure the embodiments herein. The examples used herein are intended merely to facilitate an understanding of ways in which the embodiments herein may be practiced and to further enable those skilled in the art to practice the embodiments herein. Accordingly, the examples should not be construed as limiting the scope of the embodiments herein. As used herein, the terms "a" or "an" are used, as is common in patent documents, include one or more than one. In this document, the term "or" is used to refer to a "nonexclusive or" unless otherwise indicated.

The embodiments herein relate to members discovering other members in the same social network who are in the vicinity by personal attributes such as picture(s), name and location. The personal attributes are stored in users' profiles on the social network server and are associating with each member's unique hardware identification and log-in credentials. Discovering other members would be for the purpose of exchanging personal information, connecting to each other through the social network services and communicating through SMS, E-mail, chat/instant messaging, text, multimedia, or video features that maybe offered by the same social network.

According to one aspect of the embodiments herein, mobile device users sign up or register with a service through website or using their mobile device. For ease of registration, optionally the users can sign up using existing other social network credentials and import pictures from this second social network for the new account creation if this other social network allows porting of users' information and personal attributes such as picture(s) and name. Users may be required to provide additional information if personal attributes such as picture and name were imported via API from another social network to complete the sign up process. Signing up through a mobile device will require that the user clearly have downloaded the CSA (Client Side Application) from either a depository third party application provider or request from the service website to send to his/her mobile a link allowing the download of the application. Referring now to the drawings, and more particularly to FIGS. **1** through **9**, where similar reference characters denote corresponding features consistently throughout the figures, there are shown preferred embodiments.

FIG. **1** illustrates how communication between mobile users **400** and the server **401** is conducted. FIG. **1** is directed to an arrangement in which a server/computing device **401** communicates bi-directionally with user devices **400** by way of a cellular base transceiver station (BTS) **403** through a standard that also provides separate facilities (not shown) for transmission of digital data. In certain embodiments, communication between the member's mobile devices and the server goes through a BTS **403**, and communicates according to a packet-based telecommunications protocol such as GPRS, 3G, 4G, LTE or any alternative data technology. In FIG. **1**, communication links to/from mobile devices **400** and a network-based server **401** are provided; e.g., internet server, over a BTS **403** using standard communication protocols that provide separate facilities for transmission of digital data, or through wireless connection **404** capable of connecting the user to the internet **405**. As depicted, the mobile devices **400** may communicate through the server **401** to discover other members in the vicinity based on static location provided during sign up or dynamic location obtained from LBS, GPS, or Geolocation standards.

A list of example of services provided to various devices and mobile phones **400** regardless of method of communication used to connect to the server **401** via the internet **405** include registration, view newly created social card/profile, edit profile including adding multiple pictures, obtaining user location dynamically based on standard mobile communication protocols, search for members in vicinity, access additional features provided by social network such as chat/sms view members who discovered the user, accept or reject invitations to connect, and access any features provided by a social network.

The user provides information by filling out an on-line profile through a web based interface or interface provided by the CSA, including uploading graphics or pictures. An example of an electronic generated sign-up screen is shown in FIG. **2**. Additional aspects of the registration process include creating a social card or profile, which is intended to be shared with other users or be discovered by other users. The user's profiles are available for people in the vicinity to view, via a mobile data connection to internet or direct internet connection from the mobile device to local wireless network.

FIG. **2**, with reference to FIG. **1**, depicts an example of a computer or mobile device **100**, and generated display **101** for registering with a service. This service may provide a user with a network-based storage for personal contact information, creation of a custom social card to send to discovered, or discovering, users who are also members of the service, for the purpose of providing personal contact information including personal attributes such as picture(s) to other users and for accessing personal contact information including personal attributes such as picture(s) by of other users of the service. The service may be part of a social network. The registration may offer option to sign up using another social network credentials for ease or registering and authentication. The CSA will obtain a mobile device unique ID upon complete sign up from a mobile device **100** or upon first access from a mobile device **100**.

As mentioned above, the registration process also includes downloading of the CSA, where the CSA resides on the mobile device **100**, and enabled to communicate directly with the service, through a provided internet connection, to synchronize/update contacts and to manage communication with contacts or potential new contacts, access account information via username/password, or phone ID, send search requests for information about users in the vicinity, send invitations, accept, exchange deny requests for exchange of information, obtain instances of the server addresses, allow the user to edit his/her own profile, update photos or information or add additional photos or information, etc. The CSA connects to the server through internet connection provided by the mobile device **100**.

Personal and other user information can also be added by way of the CSA for storage on a server, including hobbies, business associations, or personal information as examples. This and other information can also be added for storage on the server means other than the CSA, such as the user's personal computer, a dedicated kiosk, or other means for accessing the server through the internet. In order to take advantage of the functionalities provided by the service, the member of the service ("member") should have a mobile communication device that provides separate facilities (besides voice transmission) for transmitting digital data. This allows a mobile phone to act like any other computer over the Internet, sending and receiving data via the Internet Protocol.

One format for storing information about a user/member of the service is shown in FIGS. **2** and **3**. Depicted herein are some of the types of user information that may be stored and made accessible to the user at the server. Users may provide personal attributes such as name, address, and a picture. Information about the user's mobile device **100** may include the make, model, and phone number.

FIG. **3**, with reference to FIGS. **1** and **2**, illustrates an example of a database schema/structure **200** for maintaining personal information about a user (member) registered with the service. The information about the member may include, for example, his/her mobile device attributes such as the device key, mobile telecommunications provider; the mobile device type; the member's profile, e.g., name, address, etc.; stored photo(s) of the user; country/state where the member resides; and other information.

The service provided to users may be operated/accessible under a centralized computer system ("server"), which may include but not limited to four components: 1) Graphical user interface, providing an interface to members of the network to sign up, input/edit profile information, etc. 2) A scripting language designed for producing dynamic web pages and mobile language web pages. 3) A comprehensive data base that includes user's information, for example as discussed above and shown in FIG. **1**. Computing capabilities such as calculating proximity of members based on static location information in database or dynamic location info obtained through the CSA.

FIG. **4**, with reference to FIGS. **1** through **3**, is a flowchart depicting a process for registering with the service: Account set up and information provided through a web-based User Interface **101**, e.g., such as shown in FIG. **2**; or mobile device CSA. The user optionally has the flexibility of signing up to the service and import personal attributes including picture, name and additional information by using a second social network credentials. The CSA collects characteristics from the mobile device such as a phone number or IMEI (international Mobile Station Equipment Identity) for the purpose of associating the mobile device **400** with a user account maintained at the server **401**. This association between the unique ID such as IMEI, and the user account is used to report the mobile device location to the server dynamically and authenticate user with device used.

To completely utilize the mobile features provided by the service including dynamic search of members in vicinity, the user installs the CSA to the mobile device **400** that in addition to reporting location to the server, enables the user to update, replace, revise the social profile or personal attribute information, modify, hide or publish profile information (at the server) as contained in the user's contact information; e.g., the information contained in the user's profile which may be sent when the user initiates discovery process. Furthermore, the CSA allows the user to indicate interest in connecting with a member, or the user is discovered by others members searches and communicate to other members though features such as SMS, chat, text, and other features.

FIG. **4** illustrates how the server **401** may associate each mobile device **400** with a member account of the service using a unique ID such as IMEI. During the installation process, the server **401** receives from the CSA required Unique ID such as IMEI, or phone number. FIG. **4** is a flowchart associated with the creation of a social card and a user account/profile to initiate the use of the service of discovering others in the vicinity with personal attributes such as pictures and name. As well, it now allows other users to discover the new created account.

The CSA collects unique mobile device ID during the registration to associate with the newly created member profile for future location reporting and authentication for secure and future log in if needed. Once an account is created, the device **400** is not required to be powered on to be discovered. And the last location reported to the server **401** would be considered the current location OR the server **401** may elect to revoke last location reported and identify the user location to be the location provided during sign up as the default location known to the user.

FIG. **5**, with reference to FIGS. **1** through **4**, illustrates a discovery process flowchart where a user connects to the server **401** using the CSA on the mobile device **400** which reports the user location and returns the search results after cross referencing the user location with other members to determine proximity. The server **401** shares with the inquiring user pictures and names and possible profile information so user can select from the list members to connect to.

When a user connects to the server **401** to inquire about other members in the vicinity, the server **401** returns the search results based on proximity and provides personal attributes of all members in the vicinity based on last location known regardless of those reported members are connected at the time to the service or not. Proximity can be a default value set by the server **401** to be within feet or miles, etc. and may allow users to select the value of that proximity for any search inquiry. The user can modify the search to adjust the distance to set parameters for the proximity or even request a search in proximity of a specific point like a convention center or a particular town.

The CSA connection to the server **401** by the device **400** may be used to accomplish three tasks: First, to connect to the service. Second, to provide update on location. Third, to inquire on members in the vicinity based on the current location. FIG. **5** illustrates the discovery of the users using the requesting user's mobile device **400** first to log in and associate the device with the user as well as report the location and initiate a request to discover members in the vicinity. The requesting user's resident CSA receives from the server **401**, as a result, the profiles including pictures of all members in the vicinity.

The server **401**, after receiving an inquiry on members in the vicinity, transmits back to the requesting user mobile device **400** the pictures and names, or other information, for each of the devices in the vicinity, which are then displayed on the inquiring user mobile device screen **410**. The discovery process may thus include the showing of personal or detailed information that a member may wish to have displayed during the initial discovery step, rather than merely a device ID or address, device type, etc. At this point the requesting user has received a list of pictures and names

which he/she can now select from the mobile device **400** if further connection is desirable.

In one example, in a first step of the discovery process, a user logs in the service and initiates an inquiry on members in the vicinity. The CSA reports to the server **401** the mobile device's **400** current location based on available cellular location information or IP address if the user is logged to the service via local internet connection. In the second step, the server **401** cross references the location of the user by other users know locations based on static data in the members profiles, and, current dynamic location based on latest reported location update obtained. Once the proximity calculation is complete, the server **401** returns to the first user the results of the search and provides personal attributes including pictures of all members in proximity of the first user.

FIGS. **6** and **7**, with reference to FIGS. **1** through **5**, show in further detail how users may discover each other, in four steps:

Step 1: The user connects to server **401** through an internet capable device belonging to User #**1**, the CSA reports to server location of the device belonging to User #**1** during the log in process, the user then initiates discovery process of members in vicinity by sending an inquiry to the server **401**.

Step 2: The server **401** receives the request from User #**1** CSA, the server **401** cross references the user location based on location obtained dynamically or based on the location in the user's profile. Then, the server **401** returns the search results with profiles of members in vicinity including member's social attributes such as pictures and information.

Step 3: The first user reviews the search results and informs the server **401** with his/her interest in connecting to a particular second user (User #**2**).

If applicable, User #**1** may send to User #**2** a message/email/sms through the server **401** if the server's facility allows such features to initiate contact.

Step 4: The server **401** informs User #**2** of User #**1**'s interest in connecting and/or facilitates a chat feature and delivers the message sent by User #**1**, and provides User #**1** a picture or profile including the picture and personal attributes for User #**2** to accept or to decline the invitation to connect/chat.

FIG. **6** is a flowchart for a discovery process between users (User #**1** and User #**2**) where User #**1** connects to server **401** through an internet capable device and CSA reports to server location of the connected device. Based on the reported location or location stored in user's profile, the server **401** returns to the User #**1** profiles of all users in the vicinity based on proximity with pictures of each user.

If the user (e.g., User #**1**) elects to connect with any of the suggestions, the user (e.g., User #**1**) indicates this and the process of informing the other member (e.g., user #**2**) is managed by the server **401**. No direct contact occurs between users at this point and will not unless the users elect to exchange personal information such as mobile numbers to connect outside of provided service and features. This managed communication by the server **401** insures privacy and allows users to reject connections or terminate conversations without having to worry about direct connections potential issues. The communication between the server **401** and CSA are conducted via a common internet protocol suite which includes an application layer, transport layer, internet layer, and link layer.

FIG. **7** shows a further example of notification to discovered users alerting them to an exchange request. The notification shows the other users' personal attributes including name and picture. FIG. **7** is a flowchart depicting the processing of a user initiating discovery and showing interest to connect to a second user (e.g., User #**2**) where all communication is managed by the server **401**, according to an embodiment herein. FIG. **7** describes additional aspects of notifications and responses options to requests for exchange of electronics coordinates, personal information or connecting. All communication between users for the purpose of connecting members after the discovery is managed by the server **401**.

User #**2** (the discovered user) has the option of accepting the invitation, ignoring/declining or engage in services provided by the server **401** such as chat or sms with or without accepting connection with User #**1**. Since all communication between members is managed by the server **401**, the server database **401** may store any contact information exchanged and add it through a synchronization method with the CSA as well as keep the history of any conversations/SMS between the members.

The CSA includes feature such as storing edits to profile or communication between the members and synchronizes to the server database **401** for storage once connection between CSA and server **401** is established. This dual storage feature allows the user to restore communication between users on a new device if the device in use is lost or damaged as well as restoring all account information.

In the case where a user switches mobile devices, all the user has to do is to install the CSA on the new device and login with his/her credentials. Once an internet connection is established between the new device CSA and server **401**, and user credentials; the server **401** synchronizes all stored information to the new device, and the new installed CSA reports the new device unique hardware identification.

A server **401** is able to facilitate communication between the two users and may provide additional features such as the ability to chat via SMS or email service and other services as illustrated in FIG. **8**, with reference to FIGS. **1** through **7**. In particular, FIG. **8** illustrates the establishment of the communication between users **908**A, **908**B, such as for example SMS **904**, E-mail **906**, chat/instant messaging, in the form of text or multimedia, video, etc., between consenting users **908**A, **908**B via a server **401** that initiates discovery and consent for the users **908**A, **908**B to exchange data.

The embodiments herein provide a medium for near real-time exchange of contact information, unlike E-mail, SMS or other modes of communication between mobile devices. In this sense the user experience is enhanced over the exchange of E-mail or texting among phones, in at least three ways. First, a requesting device is not limited to conversing with only members that he/she can contact through a known e-mail address, phone number, etc. Second, the exchange may proceed simply by initiating discovery and/or responding to a discovery request. Third, the exchange can occur among multiple members of a service at the same time.

The centralized computer system ("server") **401** may include, or be associated with, an SMS server platform **904** or E-mail platform **906** that provides a corresponding channel of communication between the users **908**A, **908**B. The users **908**A, **908**B are shown communicating directly with one another via SMS platform **904** and/or E-mail platform **906**, facilitated by server **401**.

Members can contact other users, through offered types of communication between them, for example SMS, E-mail, chat/instant messaging, in the form of text or multimedia, video, etc., can also be facilitated. This is depicted in FIG.

9, with reference to FIGS. 1 through 8, and which illustrates an arrangement in which a server 401 receives GPS/LBS/RTLS/GEOLOCATION coordinates from users 1004A, 1004B, compares these coordinates to determine proximity, and informs the users 1004A, 1004B of the proximity.

In FIG. 9, server 401 is shown receiving GPS coordinates, or LBS or RTLS Location Services information, or Geolocation information, from Users 1004A and 1004B, comparing these coordinates to determine proximity, and informing the users of the proximity. Informing one user of another's proximity can be contingent upon consent of the users 1004A and 1004B, as obtained above, and can be performed in gradations, for example initially sending limited information of one user to another, then increasing the delivered information and establishing contact depending on consent. In certain embodiments, the participating members 1004A and 1004B report their locations to the server 401, for example periodically, and the server 401 maintains a record of and updates these reported locations, and provides reports to certain users, for examples to those belonging to a common social network. Members' profiles that are connected can be updated to reflect such connection information by the server/computing device 401.

In certain embodiments, the CSA, residing on the mobile device 400, may have but is not limited to the following software functionality: authentication and credentials storage capabilities.

An "authentication" portion requests authentication parameters from a user (ID or user login name and password); connects to an instance of server 401; sends user authorization information to the server side using ID or user name and password; displays a reason for denied access in case of incorrect login; and exits from the software in case of a preset number of incorrect logins; allows a user to change the password; and downloads profile information from the server 401. The CSA has the ability to store log-in credentials such as user name and password on the device 400 and transfer the credentials to the server 401 for storage in user profile database.

Another form of authentication is to insure that the unique mobile ID obtained and on record is associated with the user's log in credentials and matches user stored information. Optionally, and with user permission, the service may connect to another social network database through APIs, which are application programming interfaces, to access other social network users attributes such as name and picture.

The methods of connecting an application programming interface would differentiate from one social network to another and be proprietary to the respective social networks. An application programming interface (API) is a set of routines, protocols, and tools for building software applications for connecting one network to another network. An API expresses user attributes such as name, picture, and any additional information on the user. The API expresses as well the social network operations, inputs, out-puts, and underlying types.

The embodiments herein recognize the previously listed advancements, while the application fills the gap between locating devices and how to humanize the devices by associating personal attributes to each device so when a search is done, a face is found rather than a hardware ID number. None of the conventional standards/technologies used to locate mobile devices specified or provided methods allow the ability to associate devices with personal attributes or profiles that include picture and name. Associating personal attributes such as pictures and personal attributes allow users to identify other members and select members whom they wish to exchange contacts with or connect with through the social network.

Certain embodiments herein provide a system and method that allows individuals to use their mobile phones to discover others in the vicinity by personal attributes, such as by photos and name, after which, the two parties can exchange information through the social network via an internet connection bypassing the inherent limitations of same brand devices technology; e.g., security/privacy limitations and compatibility issues that limit or prohibit ad hoc communication.

The system includes a network-linked storage facility that collects information provided by members of the group; e.g., members of the social network, along with personal attributes in a data base hosted by a centralized computer with internet connection. The system associates a member's phone ID to the member's account/profile. The phone association takes place when the user downloads a client-side application which collects, among other things, a unique phone characteristic such as a standard IMEI (International Mobile Station Equipment Identity) or serial number of the mobile device or a unique identifier to associate the member with the account.

According to yet another embodiment, a system for exchanging information among members of a group is provided, such as members of a social network service, and includes an internet based server having a registration portion. After a user has registered online with the service, the server may send the application to the mobile device to download a client-side application into the mobile device. Alternatively, the user may download the CSA from the server or a third party depository offering the service to download the CSA.

A registration process is complete when a user creates a customized social card or profile with the social network, and the user may thereafter see or edit his/her social card on the mobile device or online through a device that connects to the internet. Any changes to the user's card or profile will be updated on both, the server of the social network and the CSA.

Another embodiment provides profiles that can be created by importing some or all information from a separate social network that offers API connections to users' information. This provides ease for registering and authentication to associate the discovery service with another social network that does not or may not offer such a discovery service of members in vicinity.

According to an embodiment herein, the process of discovery and exchange of contact information requires a CSA (Client Side Application) that is installed on the users' mobile devices and can connect users to the service computing device through an internet connection. The CSA functions include but are not limited to, obtaining user credentials for logging into the social network, obtaining unique hardware ID to link to user account, allowing user to edit profile and personal attributes, manage communication with contacts and access features of the service provides such as SMS, text, voice, multimedia and communications with other members.

The vicinity and determination of the proximity is based on either static or dynamic user location. The static location is what the user enters during registration and saved in his/her profile, or obtained through API from another social network if the user elected to sign up to the service with another social network credentials. The dynamic location is a data point entry in the user's profile location which is

constantly updated based on information obtained each time the user logs into the social network. The dynamic updated information is obtained through location standards such as GPS, LBS, RTLS or Geolocation services.

The embodiments herein fill a gap left by the existing standards and technologies when it comes to the actual discovery process and exchange of contact information over the internet bypassing ad hoc communication and compatibility and provides personalized way of discovering people by pictures primarily.

According to another embodiment herein, a method for meeting people including discovering people; e.g., viewing their pictures, names, or other personal information, and selecting one or more people to send an invitation to, is provided. The invitation may take the form of a social card, V-Card, or other manner of engaging another person in a social atmosphere like quick SMS or flag that there is interest of connecting, or even a business setting such as a meeting, trade show, conference, etc.

In one aspect, the embodiments herein provide a system and method that enables discovery of others who also desire social interaction, but without being constrained by hardware compatibility issues inherent in mobile devices by different manufacturers. According to this aspect of the embodiments herein, mobile device users (or users) can offer to other, nearby users, their pictures or other information as part of a discovery process, save contacts received from other users, and keep contacts stored on a mobile device up to date by upload/download of personal information through a networked storage capability provided by the computing device; e.g., an internet-linked storage device accessible through a cellular phone network.

For purposes of explanation, the following definitions are adopted. A "requesting user" is the person or person(s) who is connected to the service of the social network through the internet using an internet-enabled mobile device, initiates a discovery process; e.g., search for other members in the vicinity, and a "discovered user" is the person or person(s) belonging to the same social network and may or may not be connected at that time to the service but in the vicinity of the requesting user and his/her personal attributes provided as a result of the initiated inquiry to the requesting user.

In one example, two persons, a requesting user and discovered or discoverable user are members of a social network which allows the members to communicate with each other as part of the social network service. The social network computing device includes a server that stores personal attribute information including static location, capable of obtaining dynamic location data and capable of calculating the proximity of members based on location regardless if it's static or dynamic. A standard discovery process may be initiated by the requesting user for other members in the vicinity. Once the user logs into the service with the mobile device using the CSA (Client Side Application), the computing device obtains location of the user based on LBS, RTLS or Geolocation, etc.

The computing device of the social network cross-references the user's location with registered members in the vicinity of the first user and returns the results by disclosing personal attributes including pictures and names of all members in the vicinity based on proximity location. The user who initiated the inquiry can select from the results returned any discovered user he/she wishes to connect with and send a form of invitation to connect using network available tools such as email, sms, text or any customized invitation form. The invitation to connect to the inquiring user would include his/her personal attributes including picture and name. The discovered member who received invitation can accept, ignore or decline connecting with the inquiring user.

The communication between requesting and discovered users may then proceed through services provided by the social network computing device, thereby bypassing the limitations of communication over one protocol, network limitation/fees, or devices incompatibility. As an example, one member can be connected to the service of the social network and the computing device through internet service over cellular signal while the other person could be connected to the same service through WiFi® signal that provides internet access.

The computing device can be configured to frequently push updates of a user's contacts to his/her mobile device, and maintain backup of contacts and information of each user. Additionally, the computing device of the social network with the storage service may be configured to initiate an exchange of contact by suggesting to members recommendations on other members to connect with that could be a good fit to the user. The computing device can share with the user personal attributes of other members in the vicinity such as pictures and information of potential matches to connect with. The computing device is capable of cross-referencing members' locations and calculating the distance between members to eliminate members that are not in close proximity or in vicinity of the user conducting the search.

Users have the ability to customize their search proximity calculation by setting the distance and area for search. As an example, a sales person may look for members in the vicinity of 20 miles from him to introduce himself to. Alternatively, a person who is missing a convention in NYC while in California, may start search for members in NYC while he is in California to discover people he wishes to connect with. The recommendations based on vicinity are based on user's static location in a profile or dynamic updated location obtained from user's last log into the service.

According to another aspect of the embodiments herein, a system and method is provided that allows users of the social network, or more generally a database service, to create custom social cards that include social profiles, email information, phone numbers and/or multiple pictures as a personal attribute. In one embodiment, a social card associated with the discovered user may be viewed when a requesting user initiates an inquiry, this unique experience puts a human face on each phone detected during the search rather than an uninteresting Bluetooth® address which is current method of returning search in vicinity now using short range wireless signal.

For instance, the social card may include a picture, a name, location, personalized icons or card designs, etc. Furthermore, the requesting user may receive a plurality of such social cards when there are many members of the service within the short range network or vicinity, or geographic area as defined by the user who is conducting the search.

If the requesting user elects to make contact with one or more of the members discovered in the vicinity, he/she may send an invitation including sharing the requesting user's card or custom profile containing a picture or pictures of the requesting user with a personalized message intended to spark an interest with the discovered user. The discovered user may then respond by accepting a connection, denying or utilize other services provided by the social network such as SMS, chat or email between users.

According to another aspect of the embodiments herein, a method for discovering a person over a type of communication network is provided, and then the method permits communicating with that person over a second type of communication network after initial acceptance; e.g., using a WiFi® network to connect to the internet and discover the person. The first member can then continue communication with the second member later on a cellular phone network that provides data connection to the internet. This means that as long as both members connected to the service via an internet connection, they can communicate regardless of proximity or type of device each member may have or type of method used to connect to the internet.

The server is capable of providing information to members mobile devices phones not capable of exchanging data via Bluetooth® or the related ad hoc network communication protocol, and/or not connected to a cellular phone network via a common cellular phone network provider, or provider plan as long as the device has capability and is connected to the internet.

The method may further include the step of selecting and exchanging information based on pictures received as a result of the promotional message by the service to encourage members to connect to others in the vicinity. The mobile device users are members of a social network service that operates/maintains the server.

According to another embodiment, a server is provided that is capable of providing a communication between a first and second mobile phone user through the server and inform each member that they received message or invitation from others members. Notifications to mobile device users about invitations or messages received can be sent to users by SMS or the CSA notification messaging services.

In certain embodiments, unique member identifiers comprising a Bluetooth® device address, or a WiFi® address, or a main component address such as IMEI, which is the international mobile station equipment identifier, is associated with the device and member login credentials; and are stored on the server associated with the user's profile/social card.

This authentication is important so when a search is conducted on a mobile device and hardware ID is returned as search results from standard protocols, the embodiments herein associate a profile with the unique ID and returns the search results in the form of personal attributes such as picture and name. Additional advantages are detailed later for authentication with devices, retrievals of account on new devices and more. The system provided by the embodiments herein does not require that discoverable members have their respective devices turned on at the time of the search conducted by the first user or connected at the time to the service through internet connection. Thus, the server returns the search results of all members in the vicinity based on their location and proximity to the first user based on stored static locations and the latest dynamic location known and stored on the server.

The foregoing description of the specific embodiments will so fully reveal the general nature of the embodiments herein that others can, by applying current knowledge, readily modify and/or adapt for various applications such specific embodiments without departing from the generic concept, and, therefore, such adaptations and modifications should and are intended to be comprehended within the meaning and range of equivalents of the disclosed embodiments. It is to be understood that the phraseology or terminology employed herein is for the purpose of description and not of limitation.

What is claimed is:

1. A system comprising:

a computing device configured to communicate with various mobile and terminal devices to manage introduction and connection of members belonging to a same network by sharing personal attributes between members;

a first mobile communications device communicatively linked to said computing device; and

a second mobile communications device communicatively linked to said computing device,

wherein said computing device provides access to stored user profile information about a first user and a second user,

wherein said computing device is configured to store static locations of members and receive information identifying current dynamic locations of all members in said network,

wherein said computing device is configured to calculate and determine a proximity of user locations,

wherein said computing device is configured to send to said first user upon inquiring of other members in said network of said first user, personal attributes of all other members based on proximity calculations to select members that said first user may wish to connect with, and to send to said second mobile communication device an invitation on behalf of said first user for said second user to accept connecting with said first user,

wherein said computing device is configured to communicatively connect said first user and said second user,

wherein said computing device is configured to locate information about said second user from a social network storage file of said second user, and transmit this information to said first mobile communications device,

wherein the first user and the second user are members of a same social network, and the computing device is to disclose non-anonymous social network attributes including a picture, name, and location of the first user and the second user in a vicinity or within a predetermined distance from one another for the purpose of connecting members of the same social network based in part on proximity calculations between connecting members,

wherein said computing device permits discoverable members to have their respective devices turned on or turned off at a time of a search being conducted by said first user, wherein said computing device permits said discoverable members to have their respective devices unconnected to an internet connection service at said time of the search being conducted by said first user, and wherein any of turned off devices and disconnected devices is discoverable by said computer device as said internet connection service is configured to report said any of turned off devices and disconnected devices as discoverable based on a latest static and dynamic location in proximity to said first user.

2. The system of claim **1**, wherein said computing device is operable to disclose social network attributes of said first and second users for connecting members.

3. The system of claim **2**, wherein said computing device is configured to report to said first user social network attributes of all members of a social network who are in proximity to said first user.

4. The system of claim **1**, wherein said computing device is configured to receive from said first user a selection of one

or more additional users with whom said first user wishes to connect with through a social network.

5. The system of claim **1**, wherein said computing device is configured to send to said first user social attributes of one or more of selected additional users.

6. The system of claim **1**, wherein said computing device is configured to update profile information to indicate that the first and second users are connected.

7. The system of claim **1**, wherein said computing device is configured to store communication between members and synchronize saved communication on a client side application used on devices for communication.

8. The system of claim **1**, wherein said computing device is configured to assess a proximity of users to one another based on any of a static location information in a user profile and updated location indicators of a user dynamic location.

9. The system of claim **8**, wherein updated location indicators are based on user location information reported to said computing device.

10. A method comprising:

using a computing device to communicate with various mobile and terminal devices to manage introduction and connection of members belonging to a same network by sharing personal attributes between members;

communicatively linking a first mobile communications device to said computing device; communicatively linking a second mobile communications device to said computing device;

using said computing device to provide access to stored user profile information about a first user and a second user;

using said computing device to store static locations of members and receive information identifying current dynamic locations of all members in said network;

using said computing device to calculate and determine a proximity of user locations;

using said computing device to send to said first user upon inquiring of other members in said network of said first user, personal attributes of all other members based on proximity calculations to select members that said first user may wish to connect with, and to send to said second mobile communication device an invitation on behalf of said first user for said second user to accept connecting with said first user;

using said computing device to communicatively connect said first user and said second user;

using said computing device to locate information about said second user from a social network storage file of said second user, and transmit this information to said first mobile communications device, wherein the first user and the second user are members of a same social network, and the computing device is to disclose non-anonymous social network attributes including a picture, name, and location of the first user and the second user in a vicinity or within a predetermined distance from one another for the purpose of connecting members of the same social network based in part on proximity calculations between connecting members;

using said computing device to permit discoverable members to have their respective devices turned on or turned off at a time of a search being conducted by said first user; and

using said computing device to permit said discoverable members to have their respective devices unconnected to an internet connection service at said time of the search being conducted by said first user,

wherein any of turned off devices and disconnected devices is discoverable by said computer device as said internet connection service is configured to report said any of turned off devices and disconnected devices as discoverable based on a latest static and dynamic location in proximity to said first user.

11. The method of claim **10**, further comprising using said computing device to disclose social network attributes of said first and second users for connecting members.

12. The method of claim **11**, further comprising using said computing device to report to said first user social network attributes of all members of a social network who are in proximity to said first user.

13. The method of claim **10**, further comprising using said computing device to receive from said first user a selection of one or more additional users with whom said first user wishes to connect with through a social network.

14. The method of claim **10**, further comprising using said computing device to send to said first user social attributes of one or more of selected additional users.

15. The method of claim **10**, further comprising using said computing device to update profile information to indicate that the first and second users are connected.

16. The method of claim **10**, further comprising using said computing device to store communication between members and synchronize saved communication on a client side application used on devices for communication.

17. The method of claim **10**, further comprising using said computing device to assess a proximity of users to one another based on any of a static location information in a user profile and updated location indicators of a user dynamic location.

18. The method of claim **17**, wherein updated location indicators are based on user location information reported to said computing device.

* * * * *

(12) **United States Patent**
Alharayeri

(10) **Patent No.: US 10,334,397 B2**
(45) **Date of Patent: *Jun. 25, 2019**

(54) **INTERACTION TRACKING AND ORGANIZING SYSTEM**

(71) Applicant: **WIRELESS DISCOVERY LLC**, Los Gatos, CA (US)

(72) Inventor: **Ramzi Alharayeri**, San Jose, CA (US)

(73) Assignee: **WIRELESS DISCOVERY LLC**, Los Gatos, CA (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

(21) Appl. No.: **15/802,384**

(22) Filed: **Nov. 2, 2017**

(65) **Prior Publication Data**

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Related U.S. Application Data

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(51) **Int. Cl.**
H04W 24/00 (2009.01)
H04W 4/02 (2018.01)
(Continued)

(52) **U.S. Cl.**
CPC ***H04W 4/023*** (2013.01); ***G06F 16/275*** (2019.01); ***G06F 16/29*** (2019.01);
(Continued)

(58) **Field of Classification Search**
CPC H04W 4/02; H04W 4/12; H04W 8/18; H04W 48/16; H04W 64/00; H04W 84/18;
(Continued)

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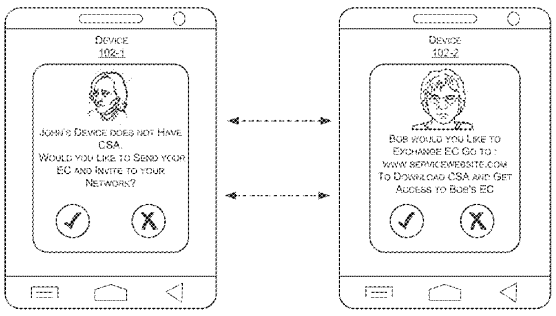
Primary Examiner — Anthony S Addy
Assistant Examiner — Matthew W Genack
(74) *Attorney, Agent, or Firm* — Rahman LLC

(57) **ABSTRACT**

A server that cross-references a first user's device location with registered members in a spatial proximity of the first user's device and returns the results by disclosing personal user attributes including pictures and names of all members in the spatial proximity of the first user's device. The first user who initiated the inquiry may select from the results returned any discovered user he/she wishes to connect with and send a form of invitation to connect using network available tools such as email, SMS, text or any customized invitation form. The invitation to connect to the inquiring user includes his/her personal attributes including a picture and name. The discovered member who received the invitation may accept, ignore, or decline connecting with the inquiring user. The first user may also receive an invitation from the server to accept, ignore, or decline connecting with the discovered member.

15 Claims, 11 Drawing Sheets



Related U.S. Application Data

application No. 15/000,960, filed on Jan. 19, 2016, now Pat. No. 9,357,352, which is a continuation-in-part of application No. 14/570,779, filed on Dec. 15, 2014, now Pat. No. 9,264,875, which is a continuation-in-part of application No. 12/351,654, filed on Jan. 9, 2009, now Pat. No. 8,914,024.

(60) Provisional application No. 61/010,891, filed on Jan. 10, 2008.

(51) **Int. Cl.**

H04L 12/58	(2006.01)
H04L 29/08	(2006.01)
H04W 8/18	(2009.01)
H04W 4/08	(2009.01)
H04W 76/00	(2018.01)
H04W 4/21	(2018.01)
G06F 16/29	(2019.01)
G06F 16/27	(2019.01)
H04L 29/06	(2006.01)
H04W 12/08	(2009.01)
G06F 16/9537	(2019.01)
H04W 84/18	(2009.01)
H04L 29/12	(2006.01)
H04W 8/00	(2009.01)

(52) **U.S. Cl.**

CPC ***G06F 16/9537*** (2019.01); ***H04L 51/00*** (2013.01); ***H04L 51/20*** (2013.01); ***H04L 51/32*** (2013.01); ***H04L 51/36*** (2013.01); ***H04L 51/38*** (2013.01); ***H04L 63/102*** (2013.01); ***H04L 67/28*** (2013.01); ***H04L 67/306*** (2013.01); ***H04W 4/08*** (2013.01); ***H04W 4/21*** (2018.02); ***H04W 8/18*** (2013.01); ***H04W 12/08*** (2013.01); ***H04W 76/00*** (2013.01); *H04L 61/1594* (2013.01); *H04W 8/005* (2013.01); *H04W 84/18* (2013.01)

(58) **Field of Classification Search**

CPC H04W 88/06; H04L 29/08657; H04L 29/08108

USPC .. 455/41.2, 412.2, 414.1, 426.1, 423.3, 434, 455/456.3

See application file for complete search history.

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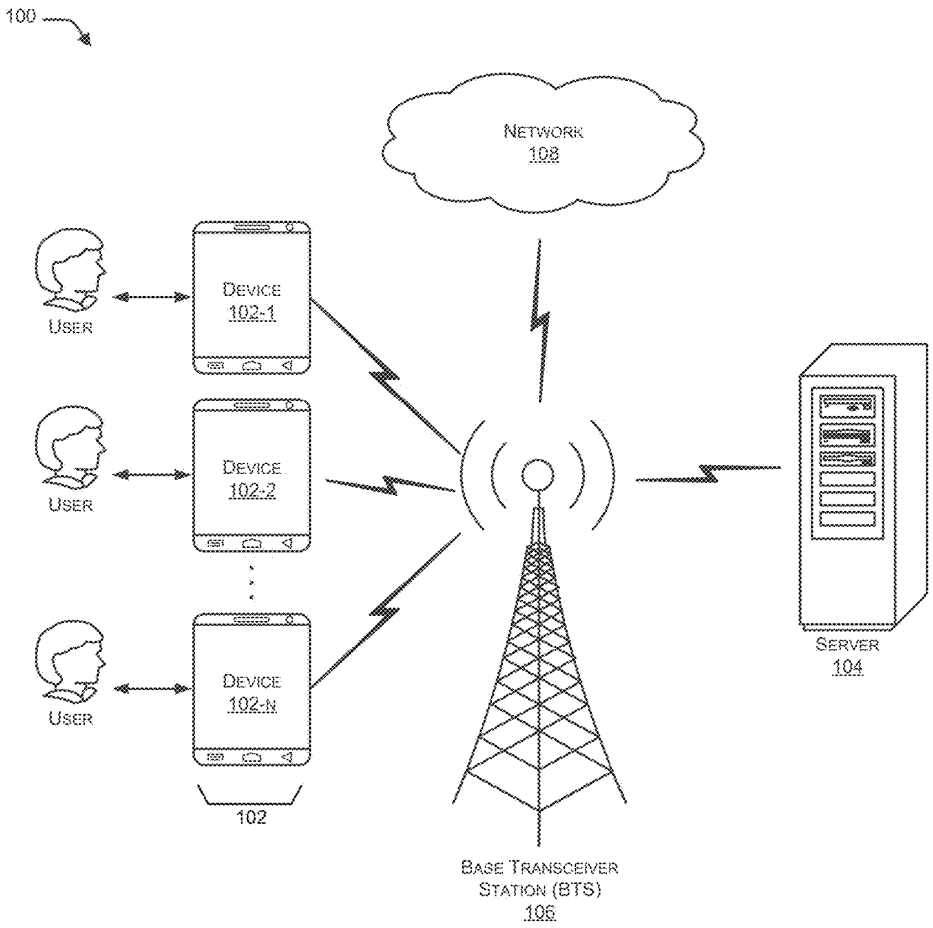
100
NETWORK
108
USER
DEVICE
102-1
USER
DEVICE
102-2
USER
DEVICE
102-N
102
SERVER
104
BASE TRANSCEIVER
STATION (BTS)
106

FIG. 1

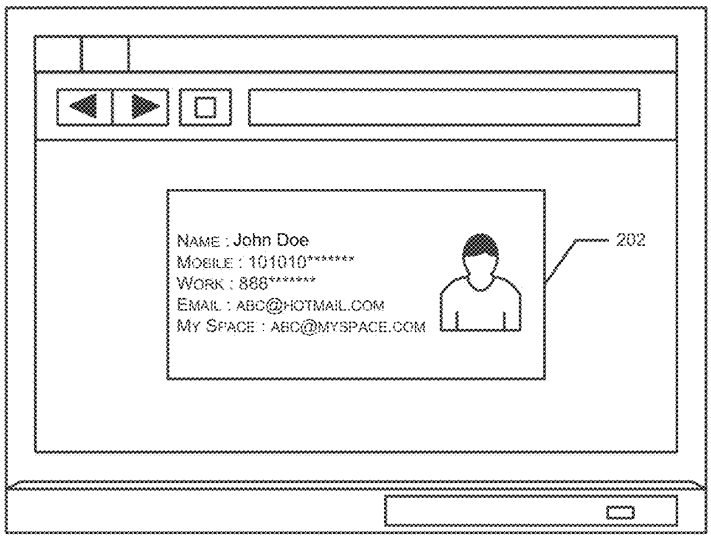
NAME : John Doe
MOBILE : 101010*******
WORK : 888*******
EMAIL : ABC@HOTMAIL.COM
MY SPACE : ABC@MYSPACE.COM
202

FIG. 2A

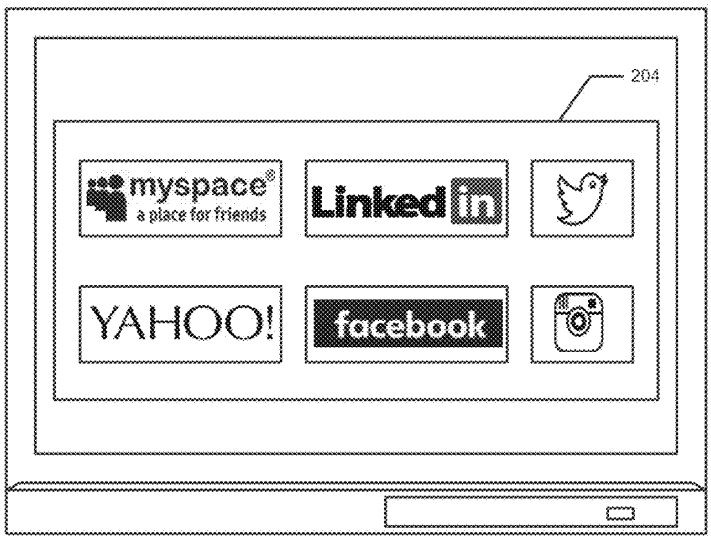
204
myspace
a place for friends
LinkedIn
YAHOO!
facebook

FIG. 2B

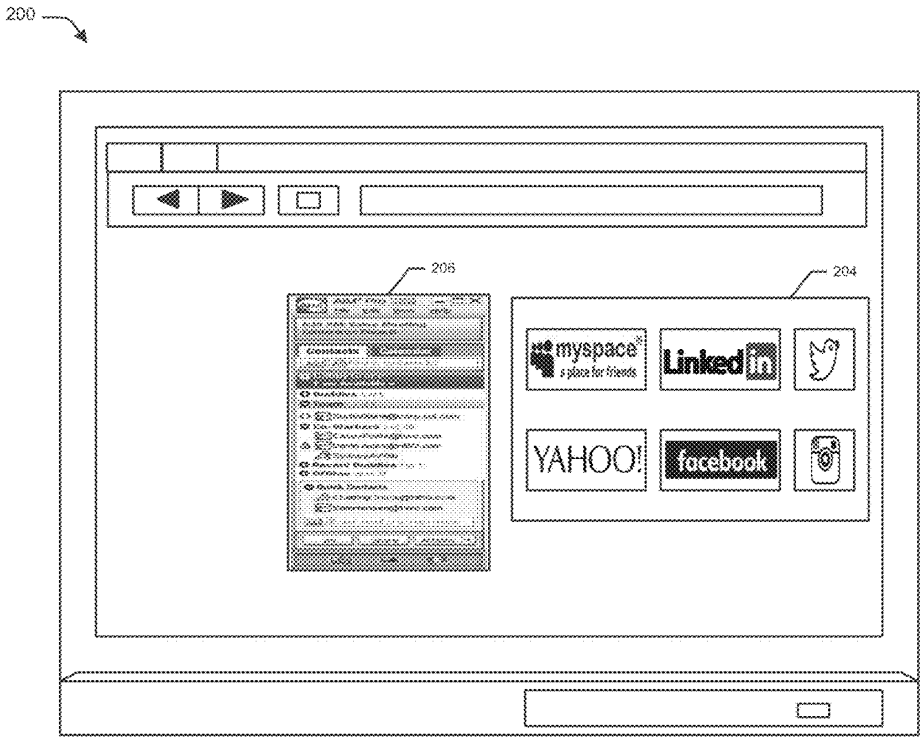

FIG. 2C

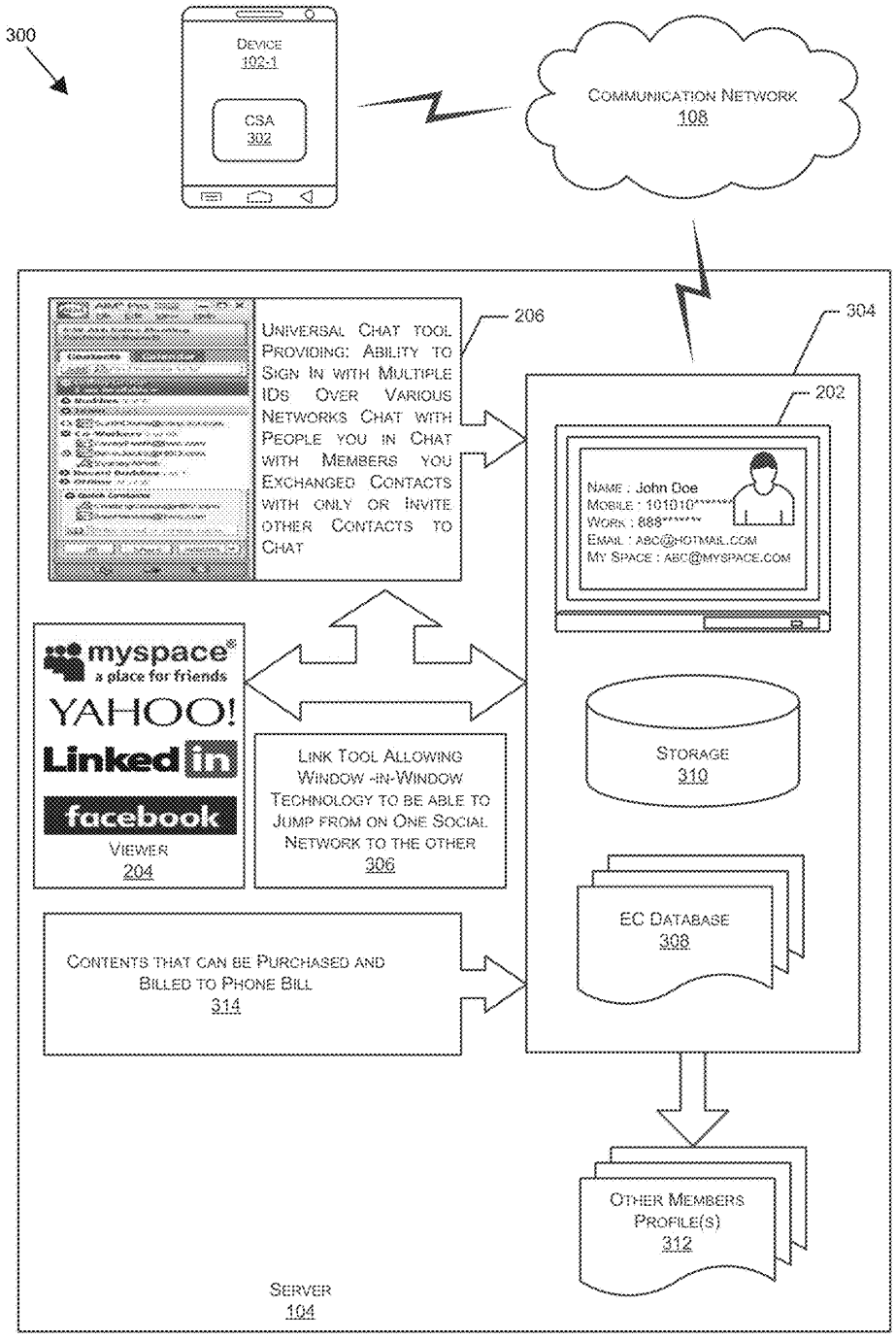
300
Device
102-1
CSA
302
Communication Network
108
206
Universal Chat tool Providing: Ability to Sign In with Multiple IDs Over Various Networks Chat with People you in Chat with Members you Exchanged Contacts with only or Invite other Contacts to Chat
304
202
Name : John Doe
Mobile : 101010******
Work : 888******
Email : ABC@HOTMAIL.COM
My Space : ABC@MYSPACE.COM
myspace
a place for friends
YAHOO!
LinkedIn
facebook
Viewer
204
Link Tool Allowing Window -in-Window Technology to be able to Jump from on One Social Network to the other
306
Storage
310
EC Database
308
Contents that can be Purchased and Billed to Phone Bill
314
Other Members Profile(s)
312
Server
104

FIG. 3

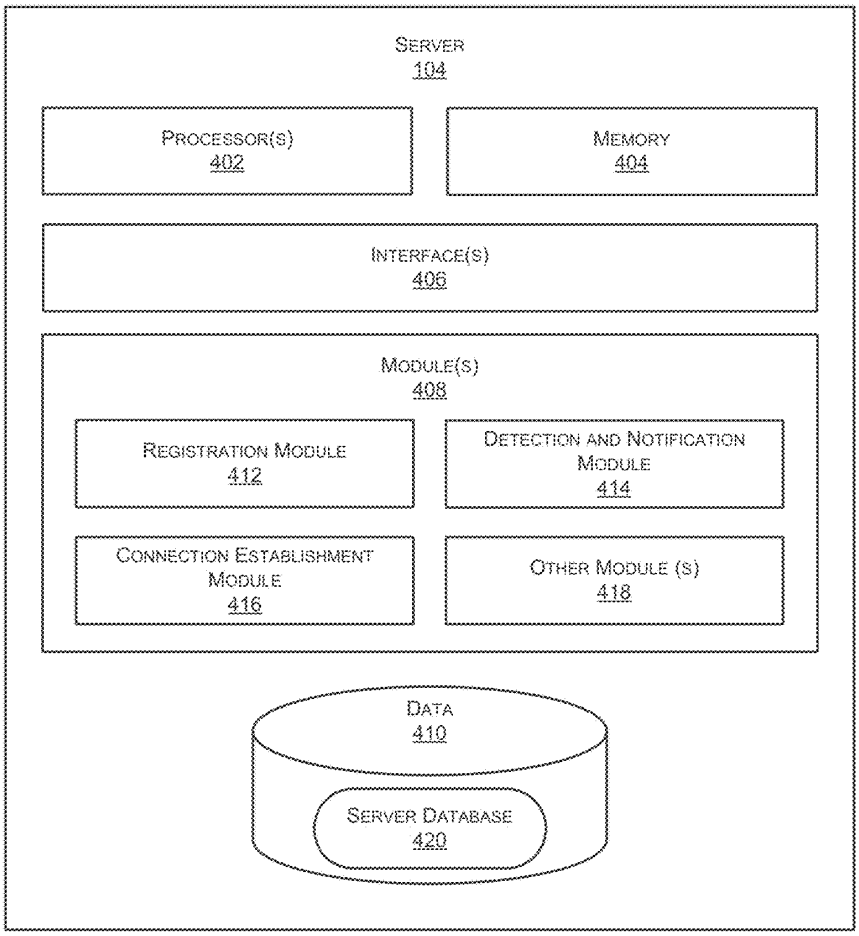
SERVER
104
PROCESSOR(S)
402
MEMORY
404
INTERFACE(S)
406
MODULE(S)
408
REGISTRATION MODULE
412
DETECTION AND NOTIFICATION MODULE
414
CONNECTION ESTABLISHMENT MODULE
416
OTHER MODULE (S)
418
DATA
410
SERVER DATABASE
420

FIG. 4

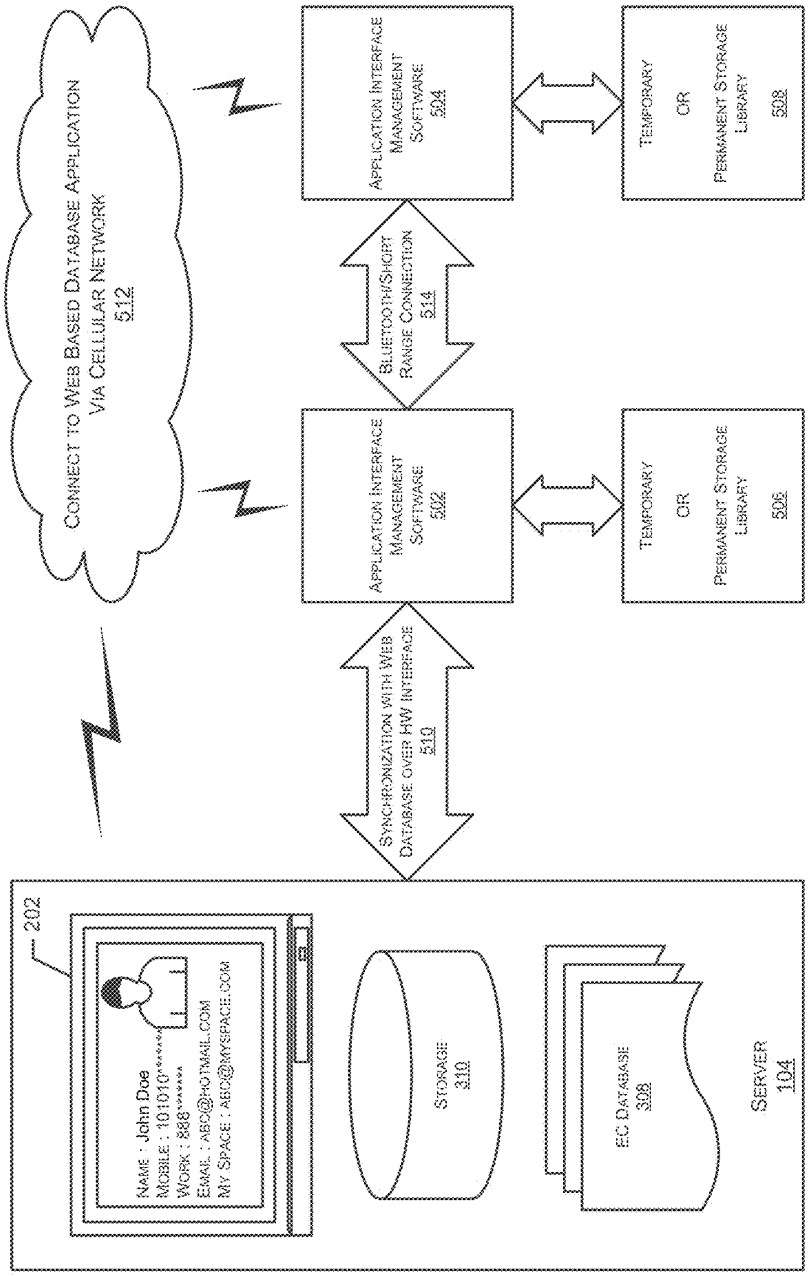
CONNECT TO WEB BASED DATABASE APPLICATION VIA CELLULAR NETWORK 512
APPLICATION INTERFACE MANAGEMENT SOFTWARE 524
TEMPORARY OR PERMANENT STORAGE LIBRARY 508
BLUETOOTH/SHORT RANGE CONNECTION 514
APPLICATION INTERFACE MANAGEMENT SOFTWARE 502
TEMPORARY OR PERMANENT STORAGE LIBRARY 506
SYNCHRONIZATION WITH WEB DATABASE OVER HW INTERFACE 510
202
NAME : John Doe
MOBILE : 101010*******
WORK : 888*******
EMAIL : ABC@HOTMAIL.COM
MY SPACE : ABC@MYSPACE.COM
STORAGE 310
EC DATABASE 308
SERVER 104

FIG. 5

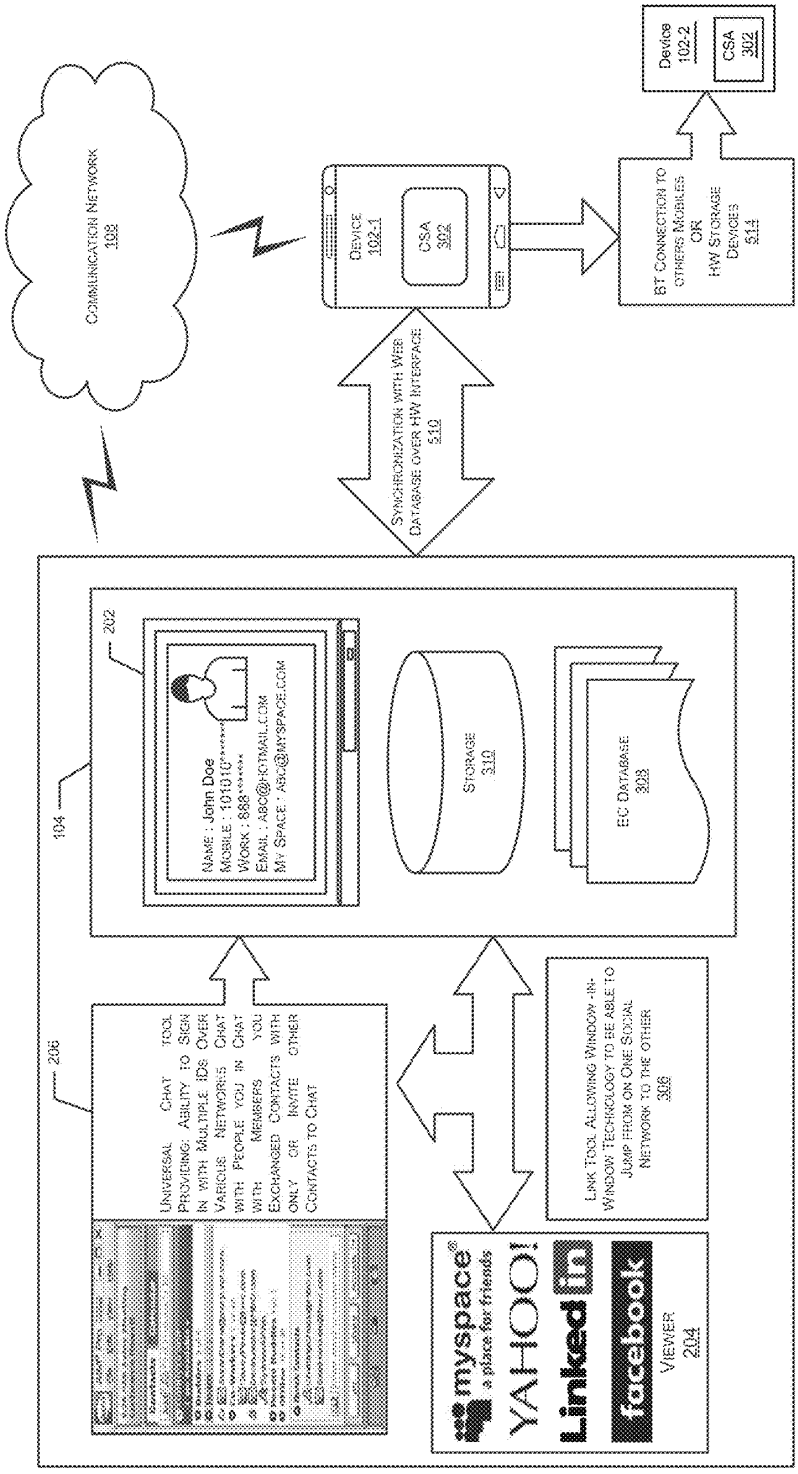
COMMUNICATION NETWORK
108
DEVICE
102-1
CSA
302
Device
102-2
CSA
302
BT CONNECTION TO
OTHERS MOBILES
OR
HW STORAGE
DEVICES
314
SYNCHRONIZATION WITH WEB
DATABASE OVER HW INTERFACE
310
104
202
NAME : John Doe
MOBILE : 101010*******
WORK : 888*******
EMAIL : ABC@HOTMAIL.COM
MY SPACE / ABC@MYSPACE.COM
STORAGE
310
EC DATABASE
308
206
UNIVERSAL CHAT TOOL
PROVIDING ABILITY TO SIGN
IN WITH MULTIPLE IDs OVER
VARIOUS NETWORKS CHAT
WITH PEOPLE YOU IN CHAT
WITH MEMBERS YOU
EXCHANGED CONTACTS WITH
ONLY OR INVITE OTHER
CONTACTS TO CHAT
LINK TOOL ALLOWING WINDOW-IN-
WINDOW TECHNOLOGY TO BE ABLE TO
JUMP FROM ON ONE SOCIAL
NETWORK TO THE OTHER
306
myspace
a place for friends
YAHOO!
LinkedIn
facebook
VIEWER
204

FIG. 6

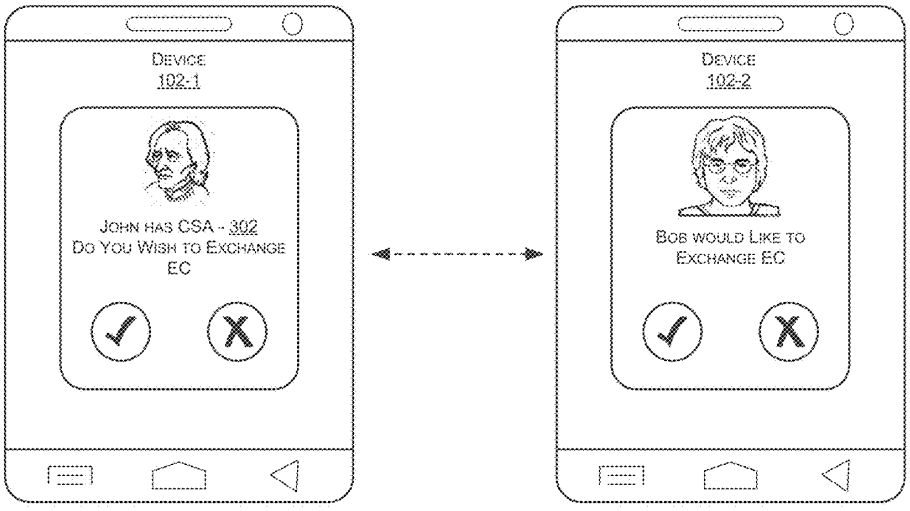
DEVICE
102-1
JOHN HAS CSA - 302
DO YOU WISH TO EXCHANGE
EC
DEVICE
102-2
BOB WOULD LIKE TO
EXCHANGE EC

FIG. 7

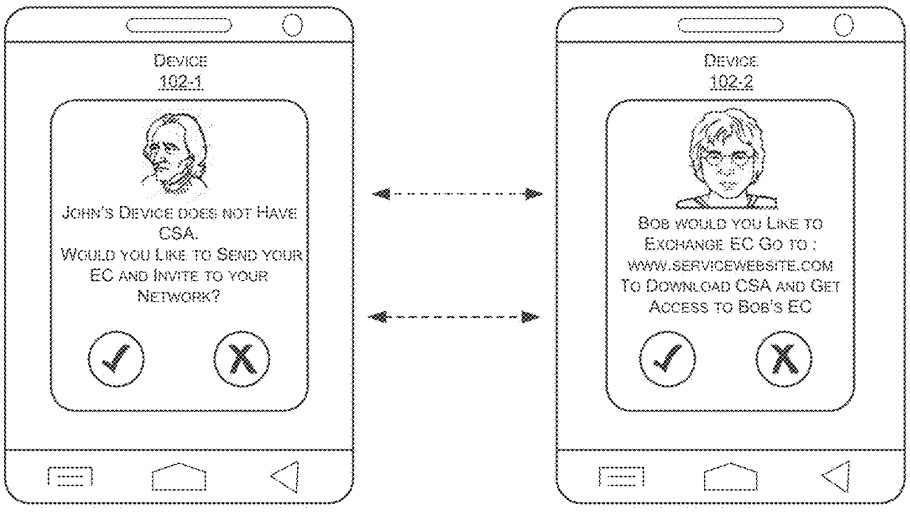
DEVICE
102-1
JOHN'S DEVICE DOES NOT HAVE CSA.
WOULD YOU LIKE TO SEND YOUR EC AND INVITE TO YOUR NETWORK?
DEVICE
102-2
BOB WOULD YOU LIKE TO EXCHANGE EC GO TO : WWW.SERVICEWEBSITE.COM TO DOWNLOAD CSA AND GET ACCESS TO BOB'S EC

FIG. 8

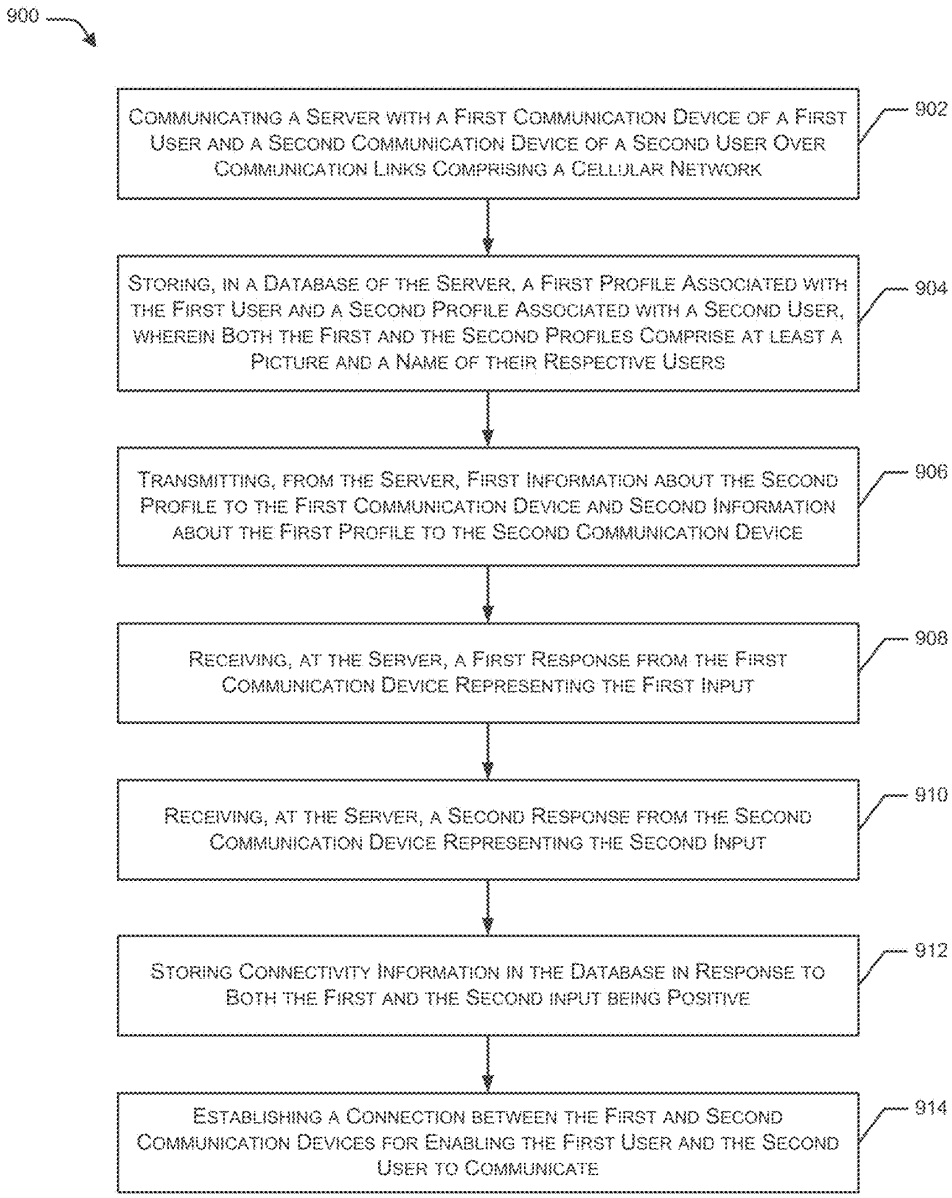
900
Communicating a Server with a First Communication Device of a First User and a Second Communication Device of a Second User Over Communication Links Comprising a Cellular Network
902
Storing, in a Database of the Server, a First Profile Associated with the First User and a Second Profile Associated with a Second User, wherein Both the First and the Second Profiles Comprise at least a Picture and a Name of their Respective Users
904
Transmitting, from the Server, First Information about the Second Profile to the First Communication Device and Second Information about the First Profile to the Second Communication Device
906
Receiving, at the Server, a First Response from the First Communication Device Representing the First Input
908
Receiving, at the Server, a Second Response from the Second Communication Device Representing the Second Input
910
Storing Connectivity Information in the Database in Response to Both the First and the Second input being Positive
912
Establishing a Connection between the First and Second Communication Devices for Enabling the First User and the Second User to Communicate
914

FIG. 9

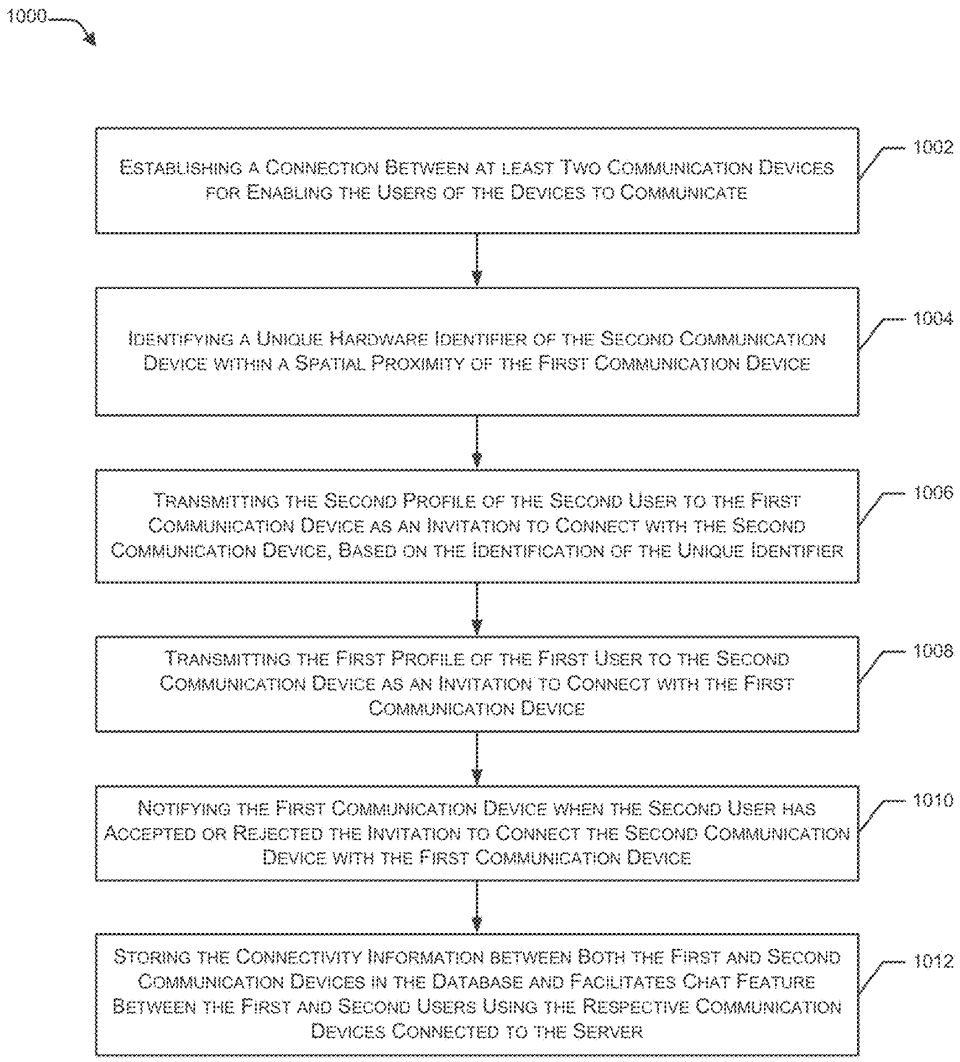
1000
Establishing a Connection Between at least Two Communication Devices for Enabling the Users of the Devices to Communicate
1002
Identifying a Unique Hardware Identifier of the Second Communication Device within a Spatial Proximity of the First Communication Device
1004
Transmitting the Second Profile of the Second User to the First Communication Device as an Invitation to Connect with the Second Communication Device, Based on the Identification of the Unique Identifier
1006
Transmitting the First Profile of the First User to the Second Communication Device as an Invitation to Connect with the First Communication Device
1008
Notifying the First Communication Device when the Second User has Accepted or Rejected the Invitation to Connect the Second Communication Device with the First Communication Device
1010
Storing the Connectivity Information between Both the First and Second Communication Devices in the Database and Facilitates Chat Feature Between the First and Second Users Using the Respective Communication Devices Connected to the Server
1012

FIG. 10

INTERACTION TRACKING AND ORGANIZING SYSTEM

CROSS-REFERENCE TO RELATED APPLICATIONS

This application is a continuation-in-part of U.S. application Ser. No. 15/136,842, filed on Apr. 22, 2016, which is a continuation of U.S. application Ser. No. 15/000,960, filed on Jan. 19, 2016, now U.S. Pat. No. 9,357,352, issued on May 31, 2016, which is a continuation-in-part of U.S. application Ser. No. 14/570,779, filed on Dec. 15, 2014, now U.S. Pat. No. 9,264,875, issued on Feb. 16, 2016, which is a continuation-in-part of U.S. application Ser. No. 12/351,654, filed on Jan. 9, 2009, now U.S. Pat. No. 8,914,024, issued on Dec. 16, 2014, which claims the benefit to U.S. Provisional Application No. 61/010,891 filed on Jan. 10, 2008, the complete disclosures of which, in their entireties, are herein incorporated by reference.

BACKGROUND

Technical Field

The embodiments herein generally relate to an interaction tracking and organizing system and, in particular, to the establishment of social connections and exchange of electronic coordinates card (also known as contact information card) via the short-range wireless communications.

Description of the Related Art

The usage or access of the social networks on the communication devices has increased tremendously. With such increase in the use of communication devices for accessing social networks, the users of the communication devices are feeling a need of exchanging contact information, including pictures, social network profiles, emails, and phone numbers, for enhancing social interaction.

SUMMARY

In view of the foregoing, an embodiment herein provides a server configured to communicate with a first communication device of a first user and a second communication device of a second user over communication links comprising a cellular network; store in a database a first profile associated with the first user and a second profile associated with a second user, both the first and the second profile comprising at least a picture and a name of their respective users; automatically determine based on wireless communication that the first communication device and the second communication device are coincidently located within a spatial proximity to one another; responsive at least to the first communication device and the second communication device coincidently located in a spatial proximity, send to the first communication device a first information about the second profile and send to the second communication device a second information about the first profile, wherein the first communication device displays on a first screen a first invitation comprising at least a picture and name from the second profile and the second communication device displays on a second screen a second invitation comprising at least picture and name from the first profile, wherein the first communication device is configured to receive a first input from the first user if he is willing to accept the first invitation and the second communication device is configured to receive a second input from the second user if he is willing to accept the second invitation; receive a first response from the first communication device representing the first input; receive a second response from the second communication device representing the second input; and responsive to both the first and the second input being positive, store information in the database that the first and the second users are now contacts of each other, and if such information is stored in the database, enable the first user and the second user to communicate using the first and the second communication devices.

The server may be configured to provide to communication device associated with users who are contacts with the first user information about the first user beyond information in the first invitation. The server may communicate with a networking device, and wherein the networking device is to provide social networking services that operates independently of the server. The server may receive profile related information from the networking device. The server may connect with a contact exchanging application executing on the first and second communication devices to execute services and features available with the server. The contact exchanging application may store updated contact information and profiles of user contacts including pictures. The server may utilize the contact exchanging application of the first communication device to discover the second communication device present within the spatial proximity thereof, and to present a picture and name of the second user associated with the second communication device on a user interface of the first communication device before the first user deciding to send an invite to connect. The contact exchanging application may present the second user with an option to accept or reject the invitation sent by the first user by sending to the server the acceptance or rejection response of the second user, and allowing the server to communicate the acceptance or rejection response to the first user.

Another embodiment provides a method comprising communicating a server with a first communication device of a first user and a second communication device of a second user over communication links comprising a cellular network; storing, in the database, a first profile associated with the first user and a second profile associated with a second user, wherein both the first and the second profiles comprise at least a picture and a name of their respective users; automatically determine based on wireless communication that the first communication device and the second communication device are coincidently located within a spatial proximity to one another; responsive at least to the first communication device and the second communication device coincidently located within a spatial proximity, transmitting, from the server, a first information about the second profile to the first communication device and a second information about the first profile to the second communication device, wherein the first communication device displays on a first screen a first invitation comprising at least picture and name from the second profile and the second communication device displays on a second screen a second invitation comprising at least picture and name from the first profile, and wherein the first communication device is configured to receive a first input from the first user if the first user is willing to accept the first invitation, and the second communication device is configured to receive a second input from the second user if the second user is willing to accept the second invitation; receiving, at the server, a first response from the first communication device representing the first input; receiving, at the server, a second response from the second communication device representing the second input; responsive to both the first and the second input being positive, storing connectivity information in the database, wherein the connectivity information represents

that the first and second users are enabled to communicate using the first and second communication devices; and establishing a connection between the first and second communication devices for enabling the first user and the second user to communicate.

The method may further comprise providing the first and second communication devices with the profile related information beyond the first and second user information comprised in the first and second invitations. The method may further comprise receiving profile related information from a networking device. The method may further comprise receiving profile related information from a networking device in communication with the server. The method may further comprise connecting the server with a contact exchanging application executing on the first and second communication devices to execute services and features available with the server on the first and second communication devices. The method may further comprise discovering, using the contact exchanging application of the first communication device, the second communication device present within the spatial proximity of one another, and presenting a picture and name of the second communication device on user interface of the first communication device before the first user deciding to send an invite to connect. The method may further comprise presenting, by the contact exchanging application, an option to the second user to accept or reject the invitation sent by the first user, sending to the server the acceptance or rejection response of the second user, and allowing the server to communicate the acceptance or rejection response to the first user.

Another embodiment provides a server configured to communicate with a first communication device of a first user and a second communication device of a second user over communication links comprising a cellular network, wherein the server comprises a processor configured to store in a data storage device a first profile associated with the first user and a second profile associated with a second user, both the first and the second profile comprises at least a picture and a name of their respective users, and able to associate each member profile with unique hardware identification associated with the member device; identify a unique ID of a second member in the vicinity and spatial proximity of the first member and provide the first member with the profile of the second member comprising a picture and name to facilitate invitation and connection between both members; send the second member the profile of the first member including picture and name upon first member initiating an invite to the second member to connect over the service; inform the first member if the second member has accepted or rejected the invite to connect initiated by the first member; and once the second member accepts the invite of the first member, store the connectivity between both members in data base and facilitates chat feature between them using respective devices connected to the server.

The server may further comprise a context information retrieval module, which when executed by the one or more processors, provides the first and second communication devices with the profile related information beyond the first and second user information comprised in first and second invitations. The server may communicate with a second server, and wherein the second server is to provide social networking services that operate independently of the server. The server may receive profile related information from the second server. The server may connect with a contact exchanging application executing on the first and second communication devices to execute services and features available with the server. The contact exchanging application may store updated contacts information and profiles of user contacts including pictures. The server may utilize the contact exchanging application of the first communication device to discover the second communication device present within the spatial proximity, and to present a picture and name of the second user associated with the second communication device on user interface of the first communication device before the first user deciding to send an invite to connect. The contact exchanging application may present the second user with an option to accept or reject the invitation sent by the first user by sending to the server the acceptance or rejection response of the second user, and allowing the server to communicate the acceptance or rejection response to the first user.

Another embodiment provides a method for communicating a server with a first communication device of a first user and a second communication device of a second user over communication links comprising a cellular network, the method comprising storing, in a data storage device of the server, a first profile associated with the first user and a second profile associated with the second user, wherein both the first and second profiles comprise at least a picture and a name of their respective users, and able to associate each user profile with a unique hardware identifier associated with the users' devices; identifying a unique hardware identifier of the second communication device within a spatial proximity of the first communication device; based on the identification of the unique identifier, transmitting the second profile of the second user to the first communication device as an invitation to connect with the second communication device; transmitting the first profile of the first user to the second communication device as an invitation to connect with the first communication device; notifying the first communication device when the second user has accepted or rejected the invitation to connect the second communication device with the first communication device; and in response to the acceptance of the invitation by the second user, storing the connectivity information between both the first and second communication devices in the data storage device and facilitates chat feature between the first and second users using the respective communication devices connected to the server.

The method may further comprise providing the first and second communication devices with the profile related information beyond the first and second user information comprised in the first and second invitations. The method may further comprise receiving profile related information from a networking server. The method may further comprise receiving profile related information from a networking server present in communication with the server. The method may further comprise connecting with a contact exchanging application executing on the first and second communication devices to execute services and features available with the server on the first and second communication devices. The method may further comprise discovering, using the contact exchanging application of the first communication device, the second communication device present within the spatial proximity, and presenting picture and name of the second communication device on user interface of the first communication device before the first user deciding to send an invite to connect. The method may further comprise presenting, by the contact exchanging application, an option to the second user to accept or reject the invitation sent by the first user, sending to the server the acceptance or rejection response of the second user, and letting the server communicate the acceptance or rejection response to the first user.

BRIEF DESCRIPTION OF THE DRAWINGS

The embodiments herein will be better understood from the following detailed description with reference to the drawings, in which:

FIG. **1** illustrates an exemplary architecture implementing a server in accordance with the embodiments herein;

FIG. **2**A illustrates a sample EC file in accordance with the embodiments herein;

FIG. **2**B illustrates a window-in-window viewer in accordance with the embodiments herein;

FIG. **2**C illustrates an exemplary representation of a web-based portal of the server in accordance with the embodiments herein;

FIG. **3** illustrates an exemplary architecture implementing the server in accordance with the embodiments herein;

FIG. **4** illustrates various components of a server in accordance with the embodiments herein;

FIG. **5** illustrates an exemplary architecture implementing the server in accordance with the embodiments herein;

FIG. **6** illustrates another exemplary architecture implementing the server in accordance with the embodiments herein;

FIG. **7** illustrates an example of the notification of an invitation to connect, in accordance with the embodiments herein;

FIG. **8** illustrates another example of the notification of an invitation to connect, in accordance with the embodiments herein;

FIG. **9** an exemplary flow diagram illustrating a first method, in accordance with the embodiments herein; and

FIG. **10** illustrates an exemplary flow diagram illustrating a second method, in accordance with the embodiments herein.

DETAILED DESCRIPTION

The embodiments herein and the various features and advantageous details thereof are explained more fully with reference to the non-limiting embodiments that are illustrated in the accompanying drawings and detailed in the following description. Descriptions of well-known components and processing techniques are omitted so as to not unnecessarily obscure the embodiments herein. The examples used herein are intended merely to facilitate an understanding of ways in which the embodiments herein may be practiced and to further enable those skilled in the art to practice the embodiments herein. Accordingly, the examples should not be construed as limiting the scope of the embodiments herein. As used herein, the terms "a" or "an" are used, as is common in patent documents, include one or more than one. In this document, the term "or" is used to refer to a "nonexclusive or" unless otherwise indicated.

The embodiments herein provide a system and a method to ascertain authenticity of the data shared over a network service. The embodiments herein provide a system and method that allows disseminating flow of data unit over an un-trusted network. The embodiments herein a system and a method to ascertain authenticity of the data based on the reputation or identity information of the owner of the data in addition to the content of the data shared over a network service. The embodiments herein provide a system and a method to disseminate the flow of data over an un-trusted network. Referring now to the drawings, and more particularly to FIGS. **1** through **10**, where similar reference characters denote corresponding features consistently throughout the figures, there are shown exemplary embodiments.

The embodiments herein provide a system and a method to establish a connection between at least two communication devices to share electronic coordinate (EC) files over short-range wireless communication. The embodiments herein provide a system and a method to allow user's communication device to regularly update a local EC file with an updated online EC file. The embodiments herein provide a system and a method to ascertain the presence of communication devices within a range of the short-range wireless communication using a common application executing on the communication devices.

The embodiments herein provide a system and a method for providing a secure and authenticated operation of sharing or exchanging EC files between communication devices. The embodiments herein provide a system and a method of maintaining and storing user's contact files in a database of on an online platform. The embodiments herein provide a system and a method of facilitating a chat feature between users having profiles or accounts over different networking platforms.

The embodiments herein may utilize communication devices, a system (server) and a method implemented in accordance with the descriptions herein. The communication devices generally include a short-range wireless transceiver, such as Bluetooth® or near field communication (NFC) transceiver, targeted towards peer-to-peer wireless communication. The communication devices may further include at least one supplementary wireless communication adapter, which preferably supports longer range and/or higher data rates than the short-range transceiver. Non-limiting examples of the supplementary adapters include a GSM (Global System for Mobile Communications) transceiver and a WLAN (Wireless LAN, wireless local area network) transceiver. The supplementary adapter may be such that it is configured to co-operate with a predetermined communications network (infrastructure) such as the adapters listed above. The communications network may further connect to other networks and provide versatile switching means for establishing circuit switched and/or packet switched connections between the communication devices.

In an aspect, when a first communication device may be brought, by a user thereof, into the spatial proximity; i.e., within the range of the short-range wireless transceiver of remote or second communication device, the communication device may receive notification (including at least picture and name of user of the communication device) from a server herein about profile associated with user of the second communication device. Similar notifications about a profile associated with the user of the first mobile device may be received on the second communication device from the server. In an example, the notification about the profile may include at a picture and a name of respective user. Also, the notification may ask for confirmation (acceptance/rejection) from respective users that whether they want to exchange electronic coordinate (EC) file (also referred to herein as a contact information card) via the short-range wireless communication link. The EC file may include information about the users beyond the information shared along with notification. For example, the EC file may include, but is not limited to, a picture or graphic, phone number, fax number, social network profile identification number, and other encrypted or non-encrypted information. Upon receiving an affirmative response from both the users, a connection may be established by the server between the first and second communication devices of both the users, for exchanging the EC files. In an aspect, the first and second

communication devices may exchange the EC files simultaneously or in a serial sequence.

In an aspect, transmission and reception of various data, such as notifications and/or EC files, relative to communication devices and/or system(s)/server(s) connecting the communication devices, may take place directly or via a common client-side application executing on both the communication devices. In an example, in case the transmission and reception of various data takes place using the common client-side application or app, the communication devices may search for another communication devices having same and common client-side application for implementation of the subject matter described in the embodiments herein.

In an aspect, the first communication device may wirelessly send and address notifications to/from remote parties, such as a server arrangement according to the embodiments herein, for storage and further distribution of the exchanged or received EC files from the remote/second communication device, directly to and through the common client-side application installed on the first communication device.

Accordingly, in an embodiment, a server of establishing a communication link for exchanging profile related information between communication devices is provided. In an example, the server may be implemented as, or within, a server for implementing the various functionalities of the embodiments herein. The server may include a non-transitory storage device having embodied therein one or more routines, and one or more processors coupled to the non-transitory storage device and operable to execute the one or more routines. In an aspect, the one or more routines may include a registration module, a detection and notification module, and a communication establishment module. The registration module may communicate with a first communication device of a first user and a second communication device of a second user over communication links including a cellular network. Upon communicating with the first and second communication devices, the registration module may store, in its database, a first profile associated with the first user and a second profile associated with a second user, where both the first and the second profiles may include at least a picture and a name of their respective users. In another example, the first and the second profiles may be stored in a common app (client-side application) executing on the first and second communication devices. In an aspect, when both the first and second communication devices are implementing the common client-side application and are connected through the same server, the first and second communication devices may be considered as users or members of the server connecting them.

Following the storage of the first and second profiles by the registration module, the detection and notification module may continuously track the locations of the first communication device and the second communication device so as to detect whether the first communication device and the second communication device are coincidently located within a spatial proximity. In an example, the range of spatial proximity may be defined based on the range of a standard short-range wireless communications link. In an example, the detection and notification module may locate the communication devices using the common app (client-side application) installed in accordance with the embodiments herein on both the communication devices.

In response to at least the first communication device and the second communication device coincidently located within the spatial proximity, the detection and notification module may transmit a first information about the second profile to the first communication device and a second information about the first profile to the second communication device. Upon transmission or reception of the information about the profiles, the first communication device may display a first invitation including at least the picture and name of the second profile, and the second communication device may display a second invitation including at least the picture and name of the first profile. Also, in an example, the first communication device may be configured to receive a first input from the first user if the first user is willing to accept the first invitation and the second communication device may be configured to receive a second input from the second user if the second user is willing to accept the second invitation.

Upon receipt of the invitations, the connection establishment module may receive a first response from the first communication device representing the first input, and a second response from the second communication device representing the second input. In an example, the common app (client-side application) running on both the first and second communication devices may provide the first and second users with an option to accept or reject the invitation sent by the other respective user. In case both the first and the second inputs are positive towards acceptance of invitation, the connection establishment module may store connectivity information in the database that the first and the second users are now contacts of each other, followed by establishing a communication between the first and second communication devices.

In an aspect, once the communication is established between the first and second communication devices, the first and second users may access or receive user information beyond information received in the first and second invitations. The user information may include, but is not limited to, a picture or graphic, phone number, fax number, social network profile identification number, and other encrypted or non-encrypted information. In an example, the information may collectively referred to as electronic coordinates (EC) of user and accessed/received in the form of a digital file called as EC file.

Based on the information received from the first and second communication devices, the server may communicate with a networking server. The networking server may be operating independently of the server. Further, the networking server may be a server providing social networking services such as Facebook®, Twitter®, Instagram®, MySpace®, LinkedIn®, and the like.

Once the server communicates with the networking server, the server may be able to use contact information, or profile related information, of first or second users to update the user information received from the first or second communication devices.

In an aspect, the server may establish a connection or communication with the contact exchanging applications executing on the first and second communication devices to execute its services and features on the first and second communication devices.

In an aspect, the contact exchanging applications may be used to store updated contacts information and profiles of user contacts including pictures on a respective communication device for facilitating instant access to user.

The embodiments herein further provide a method comprising communicating a server with a first communication device of a first user and a second communication device of a second user over communication links comprising a cellular network; storing, in a database of the server, a first profile associated with the first user and a second profile associated with a second user, where both the first and the

second profiles comprise at least a picture and a name of their respective users; responsive at least to the first communication device and the second communication device coincidently located within a spatial proximity, transmitting a first information about the second profile to the first communication device and a second information about the first profile to the second communication device, where the first communication device displays on a first screen a first invitation including at least picture and name from the second profile and the second communication device displays on a second screen a second invitation comprising at least picture and name from the first profile, and the first communication device may be configured to receive a first input from the first user if the first user is willing to accept the first invitation, and the second communication device is configured to receive a second input from the second user if the second user is willing to accept the second invitation; receiving a first response from the first communication device representing the first input; receiving a second response from the second communication device representing the second input; responsive to both the first and the second input being positive, storing connectivity information in the database, wherein the connectivity information represents that the first and second users are enabled to communicate using the first and second communication devices; and establishing a connection between the first and second communication devices for enabling the first user and the second user to communicate.

The embodiments herein further provide a server for communicating with a first communication device of a first user and a second communication device of a second user over communication links including a cellular network. In an aspect, the server may include a non-transitory storage device having embodied therein one or more routines, and one or more processors coupled to the non-transitory storage device and operable to execute the one or more routines. The one or more routines may include a registration module, a detection and notification module, and a connection establishment module. The registration module may store, in a database, a first profile associated with the first user and a second profile associated with the second user. In an example, both the first and second profiles comprise at least a picture and a name of their respective users, and are able to associate each user profile with a unique hardware identifier associated with the users' devices. For example, each user profile may be associated with device's identification number. Once the first and second profiles are stored, the detection and notification module may identify a unique hardware identifier of the second communication device within a spatial proximity of the first communication device. In an example, the range of the spatial proximity of the first communication device may be defined using the range of the short-range wireless communication.

Based on the identification of the unique identifier, the detection and notification module may transmit the second profile of the second user to the first communication device as an invitation to connect with the second communication device, and the first profile of the first user to the second communication device as an invitation to connect with the first communication device. Thereafter, the detection and notification module notifies the first communication device when the second user has accepted or rejected the invitation to connect the second communication device with the first communication device. Following the receipt of the acceptance of the notification, the connection establishment module may store the connectivity information between both the first and second communication devices in the database and facilitate chat feature between the first and second users using the respective communication devices connected to the server.

Based on the information received from the first and second communication devices, the server may communicate with a networking server. The networking server may be operating independently of the server. Further, the networking server may be a server providing social networking services such as Facebook®, Twitter®, Instagram®, MySpace®, LinkedIn®, and the like.

Once the server communicates with the networking server, the server may be able to use contact information, or profile related information, of first or second users to update the user information received from the first or second communication devices.

In an aspect, the server may establish a connection or communication with the contact exchanging applications executing on the first and second communication devices to execute its services and features on the first and second communication devices.

In an aspect, the contact exchanging applications may be used to store updated contacts information and profiles of user contacts including pictures on a respective communication device for facilitating instant access to user.

The embodiments herein further include a method for communicating a server with a first communication device of a first user and a second communication device of a second user over communication links comprising a cellular network. The method may include storing, in a database of the server, a first profile associated with the first user and a second profile associated with the second user, where both the first and second profiles comprise at least a picture and a name of their respective users, and able to associate each user profile with a unique hardware identifier associated with the users' devices; identifying a unique hardware identifier of the second communication device within a spatial proximity of the first communication device; based on the identification of the unique identifier, transmitting the second profile of the second user to the first communication device as an invitation to connect with the second communication device; transmitting the first profile of the first user to the second communication device as an invitation to connect with the first communication device; notifying the first communication device when the second user has accepted or rejected the invitation to connect the second communication device with the first communication device; and in response to the acceptance of the invitation by the second user, storing the connectivity information between both the first and second communication devices in the database and facilitates chat feature between the first and second users using the respective communication devices connected to the server.

In operation, when the first user associated with the first communication device and the second user associated with the second communication device wish to create an account with a server herein, the server communicates with the first and second devices over communication links including cellular network. Once the communication is established, the server may ask the users of the first and second device to install an app; e.g., a client-side application, on their respective devices. Upon installation of the client-side application, the users may log in and create a new user profile by selecting which information he/she wishes to exchange as part of electronic coordinates (EC). Also, the users may select information about the profile which they want to transmit along with an invitation to connect. For example,

the information about the user profile may include at least a picture and a name of the user.

Once the user profiles are created, these user profiles are stored on in a web database of the server. While storing the user profiles, the users may also store their contacts or EC files stored on the devices or other networking servers in the web database. For example, the users may synchronize their device contacts, or EC files, with the web database to update the contacts on the web database. In an example, the users may save their user IDs and passwords of other networking servers in encrypted form on the server, so as to allow the server to import contacts or ECs from these other networking servers. In one example, the server may periodically synchronize the information related to user profile and contacts from the communication devices and the other networking servers, for ensuring that the updated information is stored in the web database of the server. As described herein, the web database may also be interchangeably referred to as Electronic Coordinates (EC) master database.

Once the user profiles and the user contacts are stored and updated, the server may continuously monitor the locations of the devices associated/member with the server. In an example, the server may continuously monitor the locations using the app; e.g., a client-side application, installed on the devices. In the example, the app may search for similar or the same app installed on other communication devices present within a spatial proximity. The range of the spatial proximity may correspond to range of a short-range wireless communication standard of the communication devices.

Once the app that is installed on first communication device determines that the second communication device with same app is within a spatial proximity of the first communication device, the server may transmit information about a user profile associated with the first communication device to the second communication device, and also transmits other information about a user profile associated with the second communication device to the first communication device. In one example, the information about the profile may be transmitted and presented as an invitation to connect with the other communication device. In the example, the invitation may present at least a user picture, a user name, and an option to accept/reject the invitation.

Once both the users accept the invitation to connect, the server may store connectivity information in the web database that from now onwards the users of the first and second communication devices are contacts of each other, and then establish a communication between the app implemented on the first and second communication devices to exchange the EC files or contact information. In one example, the app implemented on the first and second communication devices may be a Bluetooth® app or a web app. In an example, in case of a Bluetooth® app, the first and second communication devices may exchange EC files or contact information over a Bluetooth® communication link. In another example, in the case of a web app, the first and second communication devices may exchange or update EC files or contact information over web based services facilitated via cellular services.

Further, once the EC files or the contact information is exchanged between the first and second communication devices, the server may facilitate a universal chat tool. Such a tool may facilitate the users of the first and second communication devices to communicate with each other using messages with their accounts maintained at different networking servers/portals. Thus, with the servers (systems) and methods, users having accounts maintained at disparate networking servers may communicate with each other over the universal chat tool.

Accordingly, the servers (systems) and methods provided by the embodiments herein enable the users to exchange EC files over short-range wireless communication link, allow the users to add the contact information (EC files) from other networking servers/portals to EC master database of the system, allow for the ability to link the online maintained contact information of EC files with a universal chat tool, and allow users to chat across the disparate networking servers/portals.

FIG. **1** illustrates an exemplary architecture **100** for creation, sharing, and exchange of an electronic coordinate (EC) file (e.g., a contact information card) via a short-range wireless communication link in accordance with the embodiments herein. The EC file may include user information having, but is not limited to, a picture or graphic, phone number, fax number, social network profile identification number, and other encrypted or non-encrypted information. Apart from creation, sharing, and exchange of the EC file, the architecture **100** may also facilitate the services including registration with a server, view newly created social card/profile on a server, edit profile including adding multiple pictures, obtain user location dynamically based on standard mobile communication protocols, search for network members in spatial vicinity, access additional features provided by social network such as chat with members, view members who discovered the user, accept or reject invitations to connect, and access any features provided by a social network facilitate by the server.

In an aspect, the architecture **100** may include a plurality of communication devices **102-1**, **102-2**, . . . , **102**-N, hereinafter collectively referred to as communication devices **102** (or simply, devices **102**) and individually as communication device **102** (or simply, device **102**). Examples of the communication devices **102** may include, but are not limited to, mobile phones, smart phones, personal computers ("PCs"), laptops, and other network-enabled devices which let users to surf the web to access sources of information and entertainment, send e-mails and instant messages.

Further, the communication devices **102** may communicate with each other and a server **104** over a cellular network **108** facilitated by at least one base transceiver station (BTS) **106**. In an example, the server **104** may be a networking server, a network server, a web server, or a data server. In an example, the server **104** may facilitate a web-based networking service which allows members or users of that service to interact with their contacts associated or linked to other disparate social networks (e.g., Facebook®, LinkedIn®, Twitter®, etc.), micro-blogs (e.g., Pinterest®, Tumblr®, Instagram®, etc.), blogs, e-commerce sites, and other social networks that support the creation, introduction, sharing, purchase, licensing, renting, and consumption of data.

The cellular network of the BTS **106** may facilitate bi-directional communication links between the communication devices **102** and the server **104** through a communication standard that provides separate facilities for transmission of digital data.

In an aspect, the BTS **106** may establish a communication network **108** between the communication devices **102** and the server **104**, and may facilitate communication according to packet-based telecommunications protocol such as 3G, 4G, LTE, or any similar data technology.

In an example, the communication network **108** may be a wireless network, a wired network or a combination thereof.

The communication network may be implemented as one of the different types of networks, such as intranet, Local Area Network (LAN), Wide Area Network (WAN), the Internet, and the like. The communication network may either be a dedicated network or a shared network. The shared network represents an association of the different types of networks that use a variety of protocols, for example, Hypertext Transfer Protocol (HTTP), Transmission Control Protocol/Internet Protocol (TCP/IP), Wireless Application Protocol (WAP), and the like, to communicate with one another. Further, the communication network may include a variety of network devices, including routers, bridges, servers, communication devices, storage devices, and the like.

When a user of communication device **102-1** wishes to join or become member of the server **104** herein, the user may sign-up or register with a service of the server **104** through website or using the communication device **102-1**. In an example, the user may access the service website by browsing a uniform resource locator (URL) address of the website. Once the user lands on the service website of the server **104**, the user may register with the server **104** by creating a new account by submitting basic information, including name and picture. For ease of registration, the user may optionally sign-up using other existing social network credentials and import pictures from these other existing social network(s) for creation of the new account with the server **104**, if the other existing social network allows transferring and/or access of users' information and personal attributes such as picture(s) and name.

In an aspect, the creation of the user profile may be performed by selectively submitting the profile related information which the user may wish to exchange with other users while establishing communication for the first time. Such selective profile related information may include, but is not limited to, a picture and name of the user. In addition to the selective information, the user information may include, but is not limited to, a picture or graphic, phone number, age, e-communication address, fax number, social network profile identification number, device's identification number, and other encrypted or non-encrypted information.

Additional aspects of the registration process may include creating a social electronic coordinates (EC) card or profile, which is intended to be shared with other members or be discovered by other members of the server **104**. An example of an EC card **202** generated is shown in FIG. **2**A, with reference to FIG. **1**. In an aspect, the user's or a member's profiles may be available for members present in a spatial proximity to the user's communication device **102-1** to view, via a mobile data connection to internet or direct internet connection from the communication device **102-1** to a local wireless network.

In an embodiment, signing-up or registration through the communication device **102-1** may require the user of that communication device **102-1** to download a CSA (Client-side Application) from either a third-party application provider or request from the service website to send to his/her communication device **102-1** a link allowing the download of the CSA. Once the CSA is downloaded on the communication device **102-1**, the user may provide information by filling out, including uploading graphics or pictures, an on-line profile through a web based interface or interface of the CSA.

Further, the CSA residing on the communication device **102-1** may facilitate the user to communicate directly with the service website of the server **104**, through a provided internet connection, to synchronize/update contacts and to manage communication with contacts or potential new contacts, access account information via username/password, or phone ID, send search requests for information about users in the spatial proximity, transmit invitations for accepting/denying exchange requests for exchange of contact information, obtain instances of the server addresses, allow the user to edit his/her own profile, and update photos or information or add additional photos or information, etc. In an example, the CSA may connect to the server **104** through internet connection provided by the communication device **102-1**. In an example, the CSA may obtain a mobile device unique identifier upon completion of the sign-up process from the communication device **102-1** or upon first access from the communication device **102-1**. The obtained unique identifier may then be submitted to the server **104** for associating with user account of the user associated with the communication device **102-1**, so that the unique identifier may be used to authenticate the communication device **102** for providing access to the user.

Further, personal and other user information, including hobbies, business associations, or personal information as examples, may also be added by way of the CSA for storage on the server **104**. In order to take advantage of the functionalities offered by the server **104**, the member of the server's service may have a communication device that provides separate facilities for transmitting digital data. This allows the communication device to act like any other computer over the Internet, including sending and receiving data via the Internet Protocol.

In a further aspect, the service offered by the server **104** may be part of a social network. Accordingly, following the creation or registration of the new account with the server **104**, the server **104** or the CSA may prompt the user to enter the login credentials for other social networks in case the user wishes to link his/her other social networks with the service offered by the server **104** herein. The user may then provide his/her login credentials for other social networks, which in turn allows the user to view multiple social networks of his/her choice into a window-in-window viewer **204** (as shown in FIG. **2**B, with reference to FIGS. **1** and **2**A) of the service. With the window-in-window viewer **204**, the user may access anyone or all the social networks at a single service of the server **104** herein.

In an aspect, from the other social networks linked onto the service of the server **104**, the server **104** may import contacts into an EC master database maintained for the user of the communication device **102-1**. Such imported contacts may be synchronized regularly or periodically with the updated profile related information from the linked other social networks, so as to maintain an up-to-date EC master database of EC files or cards.

FIG. **2**C, with reference to FIGS. **1** through **2**B, illustrates an example of a service website **200** associated with the server **104**. The service website **200** may provide a user with a network-based storage for personal contact information, creation of a custom social EC cards to send to discovered, or discovering, users who are also members of the service, for the purpose of providing personal contact information including personal attributes such as picture(s) to other users/member and for accessing personal contact information including personal attributes such as picture(s) of other users/members of the service. Further, as may be seen from FIG. **2**C, the service website **200** may include a universal chat tool **206**. The universal chat tool **206** may have the ability to login with multiple user IDs over various other social networks chat. For instance, a user may chat with users or contacts using Google®, AIM®, Yahoo!® services

and other chat applications. In one example, the universal chat in accordance with the embodiments herein may be performed between the members of the service offered or managed by the server **104** herein.

FIG. **3**, with reference to FIGS. **1** through **2**C, illustrates an architecture **300** implementing the server **104** in accordance with an exemplary embodiment. As shown in FIG. **3**, the architecture **300** may include the communication device **102-1** communicating with the server **104** over the communication network **108**.

As described above, the communication device **102-1** may include a CSA **302**. The CSA **302** may reside on any communication device, and is not limited to smartphone applications, which means that the CSA **302** would be able to provide support to multiple operating systems. The CSA **302** may be configured to collect characteristics, such as the device identification number, from the communication device **102-1** for the purpose of associating the communication device **102-1** with a user account **304** maintained at the server **104**. This association between the unique identifier, such as the device identification number, and the user account **304** may be used to report the location of the communication device **102-1** to the server **104** dynamically and authenticate the user with communication device **102-1** used.

In order to completely utilize the communication device's features provided by the service including dynamic search of members in spatial proximity, the user may have to install the CSA **302** to the communication device **102-1**. The CSA **302** associated with the server **104** may enable the user to update, replace, and revise the social profile or personal attribute information, modify, hide or publish profile information (at the server) as contained in the user's contact information; e.g., the information contained in the user's profile which may be transmitted when the user initiates discovery process. Furthermore, the CSA **302** may allow the user to indicate interest in connecting with a member, or the user is discovered by other members searches and communicate to other members though features such as SMS, chat, text, and other features.

In accordance with the embodiments herein, the server **104** may associate each communication device **102** with a member account **304** of the service using a unique identifier such as an identification number. The device identification number may be used for future location reporting and authentication for secure and future log in, if needed.

In an aspect, the member account **304** may store or maintain the profile information related to user's EC card **306**. In addition to the user's or member's EC card **306**, the member account **304** may include an EC master database **308** for storing or maintaining the EC cards/files of the users/members which at in contact with the user. Further, the member account **304** may include storage **310** for storing data temporarily during processing or execution of various tools and/or applications of the service offered by the server **104**.

In addition to the member account **304**, the server **104** may include other member accounts **312** as shown in FIG. **3**. Further, the server **104** may include contents **314** that may be purchased and billed to the user of the communication devices **102** associated with the service of the server **104**.

Further, in an aspect, the member account **304** may be associated with a link tool **306** allowing the server **104** to link and navigate the window-in-window viewer **204** from one social network window to another social network window, and may be associated with the universal chat tool **206** allowing the user to chat with other members/users having messenger accounts of different social networks.

With such an architecture **300** in place, the user of the communication device **102-1** may communicate with the server **104** to create his/her membership/user account **304** and then maintain the EC master database **308** for utilizing various services of the server **104**.

Once the user of the communication device **102-1** has created his/her membership account and associated profile on the service website of the server **104**, the user may connect with the server **104** using CSA **302** to enquire about other members in the spatial proximity of the communication device **102-1**. In an example, the range of the spatial proximity may correspond to the range of standard short-range wireless communication. The server **104**, after receiving an inquiry on members in the spatial proximity, may transmit an invitation to connect with list of members, including name and picture of the members, to the requesting communication device **102-1**, which is then displayed on screen of the communication device **102-1**. Thus, the server **104**, not only provides a list of members, but also provides names and pictures of the members for easy identification. Once the requesting user receives the list of pictures and names, the user may select from the communication device **102-1** for exchange of EC cards or contact information. Once the user selects any one or more member(s) from the received list of members, the server **104** may transmit an invitation to connect the requesting user/member with the selected member(s). At this point, when the server **104** receives an acceptance for exchange of EC cards from the selected member and the requesting member, the server **104** may establish a communication between the requesting user and the selected member to exchange the EC cards or contact information. The detailed working and operation of the server is further explained with reference to FIG. **4**.

FIG. **4**, with reference to FIGS. **1** through **3**, illustrates various components of a server **104**. In an example, the server **104** may be implemented to facilitate service accessible through a website or a client-side application. The server **104** may be in communication with one or more communication devices **102** through the communication network **108** as discussed above. In an example implementation, the communication devices **102** may be configured as mobile phones, smart phones, laptops, notepads, or any other network-enabled devices. In an example, the communication devices **102** may include a client-side application (CSA) **302** to access the service of the server **104**. As an example, the CSA **320** may be a web application or Bluetooth® application.

In an aspect, the server **104** may include one or more processor(s) **402**. The one or more processor(s) **402** may be implemented as one or more microprocessors, microcomputers, microcontrollers, digital signal processors, central processing units, logic circuitries, and/or any devices that manipulate data based on operational instructions. Among other capabilities, the one or more processor(s) **402** are configured to fetch and execute computer-readable instructions stored in a memory **404** of the server **104**. The memory **404** may store one or more computer-readable instructions or routines, which may be fetched and executed to create or share the data units over a network service. The memory **404** may include any non-transitory data storage device including, for example, volatile memory such as RAM, or non-volatile memory such as EPROM, flash memory, and the like.

The server **104** may also include an interface(s) **406**. The interface(s) **406** may include a variety of interfaces, for

example, interfaces for data input and output devices, referred to as I/O devices, storage devices, and the like. The interface(s) **406** may facilitate communication of the server **104** with various communication devices **102** coupled to the server **104**. The interface(s) **406** may also provide a communication pathway for one or more components of the server **104**. Examples of such components include, but are not limited to, module(s) **408** and data **410**.

The module(s) **408** may be implemented as a combination of hardware and programming (for example, programmable instructions) to implement one or more functionalities of the module(s) **408**. In examples described herein, such combinations of hardware and programming may be implemented in several different ways. For example, the programming for the module(s) **408** may be processor executable instructions stored on a non-transitory machine-readable storage medium and the hardware for the module(s) **408** may include a processing resource (for example, one or more processors), to execute such instructions. In some examples, the machine-readable storage medium may store instructions that, when executed by the processing resource, implement the module(s) **408**. In such examples, the server **104** may include the machine-readable storage medium storing the instructions and the processing resource to execute the instructions, or the machine-readable storage medium may be separate but accessible to server **104** and the processing resource. In other examples, the module(s) **408** may be implemented by electronic circuitry. In an example, the module(s) **408** may include a registration module **412**, a detection and notification module **414**, a connection establishment module **416**, and other module(s) **418**. The other module(s) **418** may implement functionalities that supplement applications or functions performed by the server **104** or the module(s) **408**.

The data **410** may include data that is either stored or generated as a result of functionalities implemented by any of the components of the module(s) **408**. In one example, the data **410** may include a server database **420** to store any contact information exchanged and synchronized with the communication devices **102**.

In operation, when s first user associated with a first communication device **102-1** and a second user associated with a second communication device **102-2** wish to create an account with a service offered by the server **104** herein, the users of these devices **102-1**, **102-2** may install a client-side application (CSA) **302** on their respective devices **102-1**, **102-2** to establish a communication with the server **104**. In an alternate example, the users may directly access the service website of the server **104** to create an account. Once the user accesses the server **104** via CSA or service website, the users may create their respective accounts by creating respective first and second profiles using the registration module **412**. Each of the first and second profiles may include a picture and name of a respective user.

Once the user profiles are created, the registration module **412** may store these user profiles in the web database of the server **104**. While storing the user profiles, the registration module **412** may prompt the users to store their contacts already stored on their respective devices or other networking servers, in the web database. For example, the registration module **412** may ask the users to allow synchronization of their device contacts with the web database to update the contacts on the web database. In an alternative example, the registration module **412** may prompt the users to save their user IDs and passwords of other networking servers in the encrypted form on the server **104**, so as to allow the server **104** to import contacts from these other networking servers. In one example, the registration module **104** may periodically synchronize the information related to the user profile and contacts from the communication device and the other networking servers, to ensure that the updated information is stored in the web database, or Electronic Coordinates (EC) master database, of the server **104**.

Once the user profiles and the user contacts are stored and updated, the detection and notification module **414** may continuously monitor the locations of the devices associated/member with the service of the server **104**. In an example, the detection and notification module **414** may trigger the monitoring upon receiving a request from a user of one of the first and second communication devices. Further, the detection and notification module **414** may continuously monitor the locations of the first and second devices using dynamic locations obtained from GPS, etc.

Once the detection and notification module **414** locates the second communication device in the spatial proximity of the first communication device, the detection and notification module **414** may transmit information about a user profile associated with the first communication device **102-1** to the second communication device **102-2**, and also transmits another information about a user profile associated with the second communication device **102-2** to the first communication device **102-2**. In one example, the information about the first and second profiles may be transmitted and presented as an invitation to connect with other communication device. In an example, the invitation may present at least a user picture, a user name, and an option to accept/reject the invitation.

Once both the users accept the invitation to connect through the detection and notification module **414**, the connection establishment module **416** may store a connectivity information in the web database that from now onwards the users of the first and second communication devices **102-1**, **102-2** are contacts of each other, and then establish a communication between the CSA **302** implemented on the first and second communication devices **102-1**, **102-2** to exchange the EC files or contact information. In one example, the CSA **302** implemented on the first and second communication devices **102-1**, **102-2** may be either a Bluetooth® app or a web app. In an example, in the case of a Bluetooth® app, the first and second communication devices **102-1**, **102-2** may exchange EC files or contact information over a Bluetooth® communication link. In another example, in the case of a web app, the first and second communication devices **102-1**, **102-2** may exchange or update EC files or contact information over service website facilitated via cellular services by the server **104**.

Further, once the EC files or the contact information are exchanged between the first and second communication devices **102-1**, **102-2**, the server **104** may facilitate the universal chat tool **206**. The tool **206** may facilitate the users of the first and second communication devices **102-1**, **102-2** to communicate with each other using message tools with their accounts maintained at different networking servers. Thus, with the servers (systems) and methods, users having accounts maintained at disparate networking servers may communicate with each other.

Accordingly, the servers (systems) and methods as provided by the embodiments herein enable the users to exchange EC files over a short-range wireless communication link, allow the users to add the contact information from other networking servers/portals to EC master database of the system, allow the ability to link the online maintained

contact information of EC files with a universal chat tool, and allow users to chat across the disparate networking servers/portals.

The operation of the server **104** is further described in connection with FIGS. **5** through **8**, with reference to FIGS. **1** through **4**. In an exemplary implementation, upon creating a user account with the service of the server **104**, a text message may be sent on the number associated with the communication device **102**. The text message may include a link that once clicked will result into installation of client-side application (CSA) **302** on the communication device **102**. In some examples, the CSA **302** implemented on the first and second communication devices **102-1**, **102-2** may be either a Bluetooth® app, an NFC app, or a web app.

Upon installation of the CSA **302**, the user may utilize the CSA **302** to update the online profile with the new contacts in various ways. In an example, the communication devices **102-1**, **102-2** may include application interface management software (AIMS) **502**, **504** which facilitates the storage of newly exchanged or acquired EC files in a temporary or permanent storage library **506**, **508**.

Further, once the newly exchanged or acquired EC files are stored in the temporary or permanent storage library **506**, **508**, the CSA **302** may update the online profile using cellular signals, or hardware connection that allows the communication device to be plugged into a computer. For example, as shown in FIGS. **5** and **6**, the first communication device **102-1** may include the AIMS **502**, which may decide based on the available network conditions that whether the communication device **102-1** may be connected through web database hardware interface **510** or cellular network **512** for synchronizing or updating the web database with the newly exchanged or acquired EC files.

In an example, after complete update or synchronization of the user profile, the user may download and store his/her contacts on the communication device **102-1** in case the communication device **102-1** has required storage capacity in the temporary or permanent storage library **506**, **508**.

Once the contacts at the communication device **102-1** and the web database are synchronized, the user of the communication device **102-1** may request the server **104** to detect or locate another communication device in spatial proximity of the communication device **102-1**. Upon receipt of the request, the server **104** may perform a detection to search another communication device in the spatial proximity of the requesting communication device **102-1** using the Bluetooth® or Short range connection **514** of the requesting communication device **102-1** and presents the user profile (picture and name of user) associated with the detected communication device **102-2** to the requesting communication device **102-1**. If the user of the requesting communication device **102-1** accepts the request to connect with the detected communication device **102-2**, the user of the requesting communication device **102-1** may indicate this and the process of informing/notifying the other member associated with the detected communication device **102-2** is managed by the server **104** over cellular network **512**. Thus, no direct contact occurs between users (of different communication devices) at this point and will not unless both the users elect to exchange personal information such as device numbers to connect outside of provided service and features. This managed communication by the server **104** may ensure privacy and allows users to reject connections or terminate conversations without having to worry about direct connections potential issues.

FIG. **7**, with reference to FIGS. **1** through **6**, illustrates a further example of notification to the detected users alerting them to exchange request. The notification or invitation may include the users' profile including the users' name and picture, along with an option to accept or reject. For instance, referring to FIG. **7**, when a user BOB of a requesting device **102-1** transmits an invitation to connect with a user JOHN (whose device **102-2** is found to be in spatial proximity of the BOB's device **102-1**), BOB's device **102-1** may present a message that "JOHN's device **102-2** has CSA **302** and therefore would you wish to exchange EC?". Similarly, John's device **102-2** may present a message that "BOB would like to exchange EC". The invitation to connect includes at least a picture and name of the users, and does not include the contact details such as the device numbers or addresses of the users. Once the users (BOB and John) provide a positive feedback in response to the message displayed on their devices, their devices **102-1** and **102-2** may establish a short-range wireless connection to exchange contact details or EC.

FIG. **8**, with reference to FIGS. **1** through **7**, shows an alternative example of a notification when the detected device **102-2** of JOHN does not have a CSA installed thereon. In such a scenario, the server **104** may transmit a SMS (short message service) message with a link that once clicked/accepted by JOHN may divert the JOHN to service website of the server, to accept or reject the invitation. Also, acceptance of the invitation may facilitate the download of the CSA **302** on JOHN's device **102-2** to exchange contact information or EC with device **102-1** of BOB. Also, in the scenario represented in FIG. **8**, the requesting device **102-1** of BOB may be provided with a notification that the detected device **102-2** of JOHN does not have the required CSA **302** and therefore would BOB like to share his EC cards without receiving acceptance from the detected device **102-2**, and invite JOHN to join his network over service website facilitated by the server **104**.

In the examples shown in FIGS. **7** and **8**, the user (JOHN) of the detected device **102-2** may have the option of accepting the invitation, ignoring/declining or engage in services provided by the server **104**, so as to chat or SMS with or without accepting connection with the user of the requesting device **102-1**. Since all of the communications between members/users is managed by the server **104**, the server database **420** may store any contact information exchanged and add it through a synchronization method with the CSA **302** as well as keep the history of any conversations/SMS between the members/users.

Further, the CSA **302** may include features such as storing edits to profiles or communication between the members/users and synchronizes to the server database **420** for storage once connection between the CSA **302** and server **104** is established. This dual storage feature allows the user to restore communication between users on a new device if the device in use is lost or damaged as well as restoring all account information.

In the case where a user switches or loses a device, all the user has to do is to install the CSA **302** on the new device and login with his/her credentials. Once an internet connection is established between the new device, the CSA **302** and server **104**, and user credentials are verified; the server **104** synchronizes all stored information to the new device, and the new installed CSA **302** reports the new device unique hardware identification number for further services.

Further, the server **104** facilitates communication between the two users' devices **102-1**, **102-2** and may provide additional features such as the ability to chat via SMS or email service and other services with reference to FIGS. **1** through **8**.

FIGS. **9** and **10**, with reference to FIGS. **1** through **8**, illustrate example methods **900** and **1000**, respectively, for establishing a connection between at least two communication devices **102-1**, **102-2** for enabling the users of the devices **102-1**, **102-2** to communicate with one another. The order in which the methods are described is not intended to be construed as a limitation, and any number of the described method blocks may be combined in any order to implement the methods, or an alternative method. Furthermore, methods **900** and **1000** may be implemented by processing resource or communication device(s) through any suitable hardware, non-transitory machine-readable instructions, or combinations thereof.

It may also be understood that methods **900** and **1000** may be performed by programmed communication devices, such as communication device(s) **102** or server **104**. Furthermore, the methods **900** and **1000** may be executed based on instructions stored in a non-transitory computer readable medium, as will be readily understood. The non-transitory computer readable medium may include, for example, digital memories, magnetic storage media, such as one or more magnetic disks and magnetic tapes, hard drives, or optically readable digital data storage media. The methods **900** and **1000** are described below with reference to communication device(s) **102** as described above; other suitable systems for the execution of these methods may also be utilized. Additionally, implementation of these methods **900**, **1000** is not limited to such examples.

In FIG. **9**, with reference to FIGS. **1** through **8**, at block **902**, the method **900** may include communicating a server **104** with a first communication device **102-1** of a first user and a second communication device **102-2** of a second user over communication links comprising a cellular network **108**. At block **904**, the method **900** may include storing, in a database **420** of the server **104**, a first profile associated with the first user and a second profile associated with a second user, wherein both the first and the second profiles comprise at least a picture and a name of their respective users.

At block **906**, responsive at least to the first communication device **102-1** and the second communication device **102-2** coincidently located within a spatial proximity of one another, the method **900** may include transmitting, from the server **104**, first information about the second profile to the first communication device **102-1** and second information about the first profile to the second communication device **102-2**. In an example, the first communication device **102-1** may display a first invitation comprising at least a picture and name from the second profile, and the second communication device **102-2** may display a second invitation comprising at least a picture and name from the first profile. Further, the first communication device **102-1** may be configured to receive a first input from the first user if the first user is willing to accept the first invitation, and the second communication device **102-2** may be configured to receive a second input from the second user if the second user is willing to accept the second invitation.

At block **908**, the method **900** may include receiving, at the server **104**, a first response from the first communication device **102-1** representing the first input. At block **910**, the method **900** may include receiving, at the server **104**, a second response from the second communication device **102-2** representing the second input. At block **912**, the method **900** may include storing connectivity information in the database **420** in response to both the first and the second input being positive. In an example, the connectivity information may represent that the first and second users are enabled to communicate using the first and second communication devices **102-1**, **102-2**. At block **914**, the method **900** may include establishing a connection between the first and second communication devices **102-1**, **102-2** for enabling the first user and the second user to communicate with one another.

FIG. **10**, with reference to FIGS. **1** through **9**, provides another example method **1000** for establishing a connection between at least two communication devices **102-1**, **102-2** for enabling the users of the devices **102-1**, **102-2** to communicate with one another. At block **1002**, the method **1000** may include storing, in a database **420** of the server **104**, a first profile associated with the first user and a second profile associated with the second user. In an example, both the first and second profiles comprise at least a picture and a name of their respective users, and are able to associate each user profile with a unique hardware identifier associated with the users' devices **102-1**, **102-2**.

At block **1004**, the method **1000** may include identifying a unique hardware identifier of the second communication device **102-2** within a spatial proximity of the first communication device **102-1**. At block **1006**, the method **1000** may include transmitting the second profile of the second user to the first communication device **102-1** as an invitation to connect with the second communication device **102-2**, based on the identification of the unique identifier. At block **1008**, the method **1000** may include transmitting the first profile of the first user to the second communication device **102-2** as an invitation to connect with the first communication device **102-1**.

At block **1010**, the method **1000** may include notifying the first communication device **102-1** when the second user has accepted or rejected the invitation to connect the second communication device **102-2** with the first communication device **102-1**. At block **1012**, the method **1000** may include, in response to the acceptance of the invitation by the second user, storing the connectivity information between both the first and second communication devices **102-1**, **102-2** in the database **420** and facilitates a chat feature between the first and second users using the respective communication devices **102-1**, **102-2** connected to the server **104**.

Thus, the embodiments herein allow for the locating of devices **102** and the ability to communicate amongst the devices **102** by associating personal attributes to each device **102** such that when a search is performed, a face picture is found rather than a hardware ID number (e.g., device identification number). Associating personal attributes such as pictures and personal attributes allow users to identify other members and select members whom they wish to exchange contacts with or connect with through the social network.

Further, the systems and methods described herein may be used for meeting people including discovering people; e.g., viewing their pictures, names, or other personal information, and selecting one or more people to send an invitation to. The invitation may take the form of a social card, EC card, or other manner of engaging another person in a social atmosphere like quick SMS or flag that there is interest of connecting, or even a business setting such as a meeting, trade show, conference, and the like.

The embodiments herein provide a server **104** that cross-references a location of a first user's device **102-1** with registered members in a spatial proximity of the first user's device **102-1** and returns the results by disclosing personal user attributes including pictures and names of all members in the spatial proximity of the first user's device **102-1**. The first user who initiated the inquiry may select from the

results returned any discovered user he/she wishes to connect with and send a form of invitation to connect using network available tools such as email, SMS, text or any customized invitation form. The invitation to connect to the inquiring user would include his/her personal attributes including picture and name. The discovered member who received invitation may accept, ignore or decline connecting with the inquiring user. At the same point of time, the first user may also receive an invitation from the server **104** to accept, ignore or decline connecting with the discovered member. Upon receipt of a positive acceptance response from both users, the server **104** establishes a connection to exchange the user EC cards.

The communication between requesting and discovered users may then proceed through services provided by the social network server **104**, thereby bypassing the limitations of communication over one protocol, network limitation/fees, or incompatibility for different types of devices. As an example, one member may be connected to the service of the social network and the communication device through internet service over a cellular signal while the other person may be connected to the same service through a WiFi® signal that provides internet access.

The exemplary embodiment also relates to a system/device for performing the operations discussed above. This system/apparatus/device may be specially constructed for the required purposes, or it may comprise a general-purpose computer selectively activated or reconfigured by a computer program stored in the computer. Such a computer program may be stored in a computer readable storage medium, such as, but is not limited to, any type of disk including floppy disks, optical disks, CD-ROMs, and magnetic-optical disks, read-only memories (ROMs), random access memories (RAMs), EPROMs, EEPROMs, magnetic or optical cards, or any type of media suitable for storing electronic instructions, and each coupled to a computer system bus.

The foregoing description of the specific embodiments will so fully reveal the general nature of the embodiments herein that others can, by applying current knowledge, readily modify and/or adapt for various applications such specific embodiments without departing from the generic concept, and, therefore, such adaptations and modifications should and are intended to be comprehended within the meaning and range of equivalents of the disclosed embodiments. It is to be understood that the phraseology or terminology employed herein is for the purpose of description and not of limitation.

What is claimed is:

1. A server configured to communicate with a first communication device of a first user and a second communication device of a second user over communication links comprising a cellular network, wherein the server comprises a processor configured to:

store in a data storage device a first profile associated with the first user and a second profile associated with a second user, both the first and the second profile comprises at least a picture and a name of their respective users thereby automatically eliminating anonymous communication of the first profile and the second profile between member devices without intervention by the first user or the second user;

associate each member profile with a unique hardware identification associated with the member devices;

identify a unique ID of a second member in the vicinity and spatial proximity of a first member and provide the first member with the profile of the second member comprising a picture and name to facilitate a connection between both members;

send the second member the profile of the first member including the picture and name upon the first member initiating an invite to the second member to connect over a networking service;

inform the first member if the second member has accepted or rejected the invite to connect initiated by the first member; and

once the second member accepts the invite of the first member, store the connectivity between both members in the data storage device and facilitate a chat feature between them using respective devices connected to the server,

wherein the first user and the second user are members of a same social network, and the processor is to disclose non-anonymous social network attributes including a picture, name, and location of the first user and the second user in a vicinity or within a predetermined distance from one another for the purpose of connecting members of the same social network based in part on proximity calculations between connecting members,

wherein the server permits discoverable members to have their respective devices turned on or turned off at a time of a search being conducted by the first user, wherein the server permits the discoverable members to have their respective devices unconnected to an internet connection service at the time of the search being conducted by the first user, and wherein any of turned off devices and disconnected devices is discoverable by the server as the internet connection service is configured to report the any of turned off devices and disconnected devices as discoverable based on a latest static and dynamic location in proximity to the first user.

2. The server of claim **1**, further comprising a context information retrieval module, which when executed by the one or more processors, provides the first and second communication devices with the profile related information beyond the first and second user information comprised in first and second invitations.

3. The server of claim **1**, wherein the server is to communicate with a second server, and wherein the second server is to provide social networking services that operate independently of the server.

4. The server of claim **3**, wherein the server is to receive profile related information from the second server.

5. The server of claim **3**, wherein the server is to connect with a contact exchanging application executing on the first and second communication devices to execute services and features available with the server.

6. The server of claim **5**, wherein the contact exchanging application is to store updated contacts information and profiles of user contacts including pictures.

7. The server of claim **5**, wherein the server is to utilize the contact exchanging application of the first communication device to discover the second communication device present within the spatial proximity, and to present a picture and name of the second user associated with the second communication device on user interface of the first communication device before the first user deciding to send an invite to connect.

8. The server of claim **5**, wherein the contact exchanging application is to present the second user with an option to accept or reject the invitation sent by the first user by sending to the server the acceptance or rejection response of

the second user, and allowing the server to communicate the acceptance or rejection response to the first user.

9. A method for communicating a server with a first communication device of a first user and a second communication device of a second user over communication links comprising a cellular network, the method comprising:

storing, in a data storage device of the server, a first profile associated with the first user and a second profile associated with the second user, wherein both the first and second profiles comprise at least a picture and a name of their respective users thereby automatically eliminating anonymous communication of the first profile and the second profile between user devices without intervention by the first user or the second user;

associating each user profile with a unique hardware identifier associated with the users'devices;

identifying a unique hardware identifier of the second communication device within a spatial proximity of the first communication device;

based on the identification of the unique identifier, transmitting the second profile of the second user to the first communication device as an invitation to connect with the second communication device;

transmitting the first profile of the first user to the second communication device as an invitation to connect with the first communication device;

notifying the first communication device when the second user has accepted or rejected the invitation to connect the second communication device with the first communication device; and

in response to the acceptance of the invitation by the second user, storing the connectivity information between both the first and second communication devices in the data storage device and facilitating a chat feature between the first and second users using the respective communication devices connected to the server,

wherein the first user and the second user are members of a same social network, and the server is to disclose non-anonymous social network attributes including a picture, name, and location of the first user and the second user in a vicinity or within a predetermined distance from one another for the purpose of connecting members of the same social network based in part on proximity calculations between connecting members,

wherein the server permits discoverable members to have their respective devices turned on or turned off at a time of a search being conducted by the first user, wherein the server permits the discoverable members to have their respective devices unconnected to an internet connection service at the time of the search being conducted by the first user, and wherein any of turned off devices and disconnected devices is discoverable by the server as the internet connection service is configured to report the any of turned off devices and disconnected devices as discoverable based on a latest static and dynamic location in proximity to the first user.

10. The method of claim **9**, further comprising providing the first and second communication devices with the profile related information beyond the first and second user information comprised in the first and second invitations.

11. The method of claim **9**, further comprising receiving profile related information from a networking server.

12. The method of claim **9**, further comprising receiving profile related information from a networking server present in communication with the server.

13. The method of claim **9**, further comprising connecting with a contact exchanging application executing on the first and second communication devices to execute services and features available with the server on the first and second communication devices.

14. The method of claim **13**, further comprising discovering, using the contact exchanging application of the first communication device, the second communication device present within the spatial proximity, and presenting picture and name of the second communication device on user interface of the first communication device before the first user deciding to send an invite to connect.

15. The method of claim **13**, further comprising presenting, by the contact exchanging application, an option to the second user to accept or reject the invitation sent by the first user, sending to the server the acceptance or rejection response of the second user, and letting the server communicate the acceptance or rejection response to the first user.

* * * * *

IN THE UNITED STATES DISTRICT COURT

IN AND FOR THE DISTRICT OF DELAWARE

WIRELESS DISCOVERY LLC,)
)
----------Plaintiff,)
) Case No.
vs.) 22-481-GBW
)
GRINDR, INC.,)
)
----------Defendant.)

WIRELESS DISCOVERY LLC,)
)
----------Plaintiff,)
) Case No.
vs.) 22-479-GBW
)
DOWN APP, INC.,)
)
----------Defendant.)

WIRELESS DISCOVERY LLC,)
)
----------Plaintiff,)
) Case No.
vs.) 22-478-GBW
)
COFFEE MEETS BAGEL, INC.,)
)
----------Defendant.)

WIRELESS DISCOVERY LLC,)
)
----------Plaintiff,)
) Case No.
vs.) 22-482-GBW
)
HILY CORP.,)
)
----------Defendant.)

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WIRELESS DISCOVERY LLC,)
)
----------Plaintiff,)
) Case No.
vs.) 22-484-GBW
)
THE MEET GROUP, INC.,)
)
----------Defendant.)

WIRELESS DISCOVERY LLC,)
)
----------Plaintiff,)
) Case No.
vs.) 22-480-GBW
)
EHARMONY, INC.,)
)
----------Defendant.)

TRANSCRIPT OF MOTIONS TO DISMISS

MOTIONS TO DISMISS had before the Honorable Gregory Williams, U.S.D.C.J, in Courtroom 4B on the 14th of December, 2022.

APPEARANCES

CHONG LAW FIRM, PA
BY: JIMMY CHONG, ESQ.

-and-

RAMEY LLP
BY: WILLIAM RAMEY, III, ESQ.

Counsel for Plaintiff

(Appearances continued.)

BAKER & HOSTETLER
BY: JEFFREY LYONS, ESQ.
DOUGLAS GRADY, ESQ.

Counsel for The Meet Group and eHarmony

FISH & RICHARDSON, P.C.
BY: JEREMY ANDERSON, ESQ.
NOEL CHAKKALAKAL, ESQ.

Counsel for Down App, Grindr, Coffee Meets Bagel, and Hily

THE COURT: All right. So we're here for oral argument on some motions to dismiss in six cases, *Wireless Discovery LLC versus Coffee Meets Bagel Inc.*, 22-478, and related cases: 22-469, 22-480, 22-481, 22-482, and 22-484. Let's have counsel put their appearances on the for the record.

MR. CHONG: Good morning, Your Honor. Jimmy Chong for the plaintiff. I'm here with Mr. William Ramey, Your Honor.

MR. RAMEY: Good morning, Your Honor. If I may, I have the managing director of Wireless Discovery and the inventor of the patents in suit here as well. Thank you, Your Honor.

MR. LYONS: Good morning, Your Honor. Jeff Lyons from Baker Hostetler here for Defendants eHarmony and The Meet Group. I'm joined by Mr. Doug Grady, also from Baker Hostetler's Seattle office, and with us too we have the general counsel and corporate secretary of The Meet Group, Norman Petty.

THE COURT: Thank you.

MR. ANDERSON: Good morning, Your Honor. Jeremy Anderson from Fish & Richardson.

We represent Coffee Meets Bagel, Down App, Grindr, and Hily. With me is my colleague from our Dallas office, Noel Chakkalakal.

THE COURT: Good morning. So we've allocated an hour for this oral argument. I assume that each side will have a half an hour. I assume the defendants will coordinate as to how they split the time up.

So all right. So we can begin with the first set of motions to dismiss. I believe it's Defendant's motion.

MR. GRADY: Good morning, Your Honor. May it please the Court. My name is Doug Grady from Baker Hostetler in the Seattle office, and as shared, I represent eHarmony in the matter 22-480 as well as The Meet Group in 22-484.

The specific relief we're requesting today is that all four patents be ordered invalid because they are patent-ineligible pursuant to 35 U.S.C. 101, *Alice*, and its progeny.

As a threshold matter, I want to share one distinction as between all six defendants, and that is that Defendant The Meet Group was sued only for infringement of the '875 patent.

All of the other defendants were sued across all four patents, so it is possible today that if Your Honor so held that the '875 patent could be held invalid, then that would dismiss The Meet Group, but others could be held not invalid and that would keep others in, so that's the only distinction as a housekeeping matter out of the gate.

As to the order of presentation today, I will argue *Alice* Step 1. That is, I will argue that the idea of social networking as called out in these claims, such as matching people by location, is abstract, and my colleague, Mr. Chakkalakel, will argue and discuss *Alice* Step 2, and we'd like to reserve time for rebuttal, five minutes.

As a threshold matter, Your Honor, Claims 1 through 9 of the '875 patent were held invalid by Judge Albright in the Western District of Texas in November of 2021, and we believe, as discussed in detail in our briefing, that those claims are invalid now because of principles of collateral estoppel.

THE COURT: Didn't he hold Claim 1 of the '875 indefinite and that you are arguing

that because Claims 2 through 9 incorporate the elements of Claim 1?

MR. GRADY: That's correct. I apologize. I misspoke.

So to the extent -- and to be clear, in its opposition, which Wireless Discovery filed in July of 2022, they did not address this issue at all. In fact, they were completely silent. On that basis alone, we believe the motion should be granted.

But it's also true that in Wireless Discovery's opposition to eHarmony's motion, which the opposition was filed in October of 2022, they said that they disagreed with the assertion but thereafter said that they were no longer going to assert Claims 1 through 9 against eHarmony. So to be clear, apparently, Claims 1 through 9 are no longer asserted against eHarmony. There's some ambiguity as against Claims 1 through 9 being asserted to The Meet Group.

In any event, as Your Honor probably knows, we filed a counterclaim including a declaratory judgment of invalidity directed to all claims of the '875 patent. So while

Wireless Discovery agreed that they were no longer asserting those claims, they did not give us a covenant not to sue, and, therefore, we believe that if this Court is not going to look at Claims 1 through 10 -- excuse me -- Claims 1 through 9 through the lens of, as to Claim 1, Judge Albright, and, as to Claims 2 through 9, our argument, we still would ask that this Court invalidate all claims of the '875 patent because there is a pending case or controversy and because both The Meet Group and Wireless Discovery believe the claims are invalid pursuant to Alice and its progeny.

THE COURT: Let me just -- I understand you're also working on Section 101, but with respect to your collateral estoppel argument, other than the IP case, what other cases, if any, support Defendant eHarmony and Meet Group, Inc.'s, argument that if an independent claim is held invalid for indefiniteness that dependent claims are also invalid for indefiniteness?

MR. GRADY: I'm sorry, Your Honor. I'm not able to cite another case off the top of my head. I'm happy to supplement the

briefing. It's my recollection that that authority was on point, but I apologize. I don't have another case at the ready.

THE COURT: Right. So in the Ivermed 10:09AM case, the Court just noted in passing, so that's why I was looking to see whether there were any other cases out there on point that address that issue other than that case.

MR. GRADY: I believe there are. 10:10AM Candidly, we didn't spend a lot of time with it in reply because we didn't receive a substantive response in opposition. That's not to cast aspersions. It's just to merely call out the obvious, that there wasn't anything 10:10AM there in the opposition, so we didn't feel obliged to respond and reply. I would be more than happy to supplement that paper later today, if that would be helpful to Your Honor.

But I do think it's generally the 10:10AM principle that an independent claim, if invalid, usually invalidates the dependent claims, but I acknowledge that there are exceptions, and one might apply here, so I want to be thorough in giving the briefing that 10:10AM would be helpful to Your Honor.

THE COURT: Thank you.

MR. GRADY: Your Honor, with regard to the representative claims of the -- that are at issue here, on the screen to Your Honor's 10:11AM left is representative Claim 10 of the '875 patent, and on the left side of the screen is the unabridged claim language from Claim 10, and on the right side we've included a number of abridged understandings of those claims 10:11AM which call out the words "providing," "receiving," "receiving," "sending," "connecting," and the like.

We believe that -- and the authority, we think, supports that this claim is 10:11AM representative of all of the claims of the '875 patent, and we also have briefed elsewhere that there are other claims that we believe are representative of the other patents, and but for the sake of, sort of, clarity on the 10:12AM PowerPoint, we've omitted those here. But generally speaking, we believe that representative Claim 10 is representative of all the claims of the '875 patent. And for that matter, although we stand by the papers, 10:12AM we believe that representative Claim 10 is

representative of all of the claims that are at issue here.

THE COURT: Okay. My understanding is that it's asserted that Claim 1 of the '352 10:12AM patent is representative, Claim 1 of the '267 patent is representative, Claim 1 of the '297 patent is representative.

MR. GRADY: That's correct.

THE COURT: Okay.

MR. GRADY: Specifically, that's 10:12AM correct. The point that I was trying to draw to Your Honor is that the *Content Extraction* case from the CAFC in 2014 calls out a basic test for this Court as to whether they're 10:13AM representative. And the two issues that the CAFC called out is whether those claims are "substantially similar" and "linked to the same abstract idea."

And in this case, as we articulated in 10:13AM our briefing more thoroughly, we believe that these limitations are substantially similar to all of the limitations across the '875 and as to the other three patents across, with those specific claims being analogous to the others 10:13AM or representative to the other claims in those

other patents.

And likewise, we believe they're all linked to the same abstract idea. That particular language that we identify as the 10:13AM abstract idea, I'd like to put a pin in that and come back to it in the next moment. But generally speaking, all of the words used in these claims are linked to the same abstract idea of social networking or networking as 10:14AM between entities who are meeting or dating or otherwise in the same social community or social network.

So we believe that the test for *Content Extraction* is met by -- particularly with the 10:14AM arguments in our briefing, but generally with Claim 10 of the '875 patent being probative of all of the language across all of the patents. And that is not surprising because these are all from the same patent family. They all have 10:14AM the same patent parent, and they all are related by lineage.

And finally, I think, with regard to the representative claim, the *Berkheimer* case in 2018 from the Court of Appeals of the Federal 10:15AM Circuit made clear that it's the patentee who

has the burden to share or argue that the other claims are not representative. It's their burden, and not the plaintiff. Once the plaintiff -- excuse me. Once the movant sets
10:15AM forth their argument, it is the patentee who is obliged to set forth an argument. And we looked in earnest for such an argument in Wireless Discovery's briefing, and there is nothing there. That's not to cast aspersions.
10:15AM It's just to share that it's probably because there is no way to meaningfully distinguish the other claims in the other patents from those which we've called out in our briefing.

The question, next, is to the abstract
10:15AM idea, Your Honor. We acknowledge, and I have long, at least, personally struggled with the idea of how, as an abstraction, one can identify whether there's an abstract idea that's being claimed or not. And thankfully,
10:16AM the CAFC has demystified that. In 2016 in *Enfish versus Microsoft*, that case shared that all that District Courts must do is "compare the claims at issue to those claims already found to be directed to an abstract idea."
10:16AM And that was of course, in 2016, much

closer to *Alice*, which is the seminal case upon which this Court and others rely. But since 2016, we've had the benefit of a whole host of cases, including a number of them out of that
10:16AM CAFC, and a whole host of cases in this district which have relied upon those CAFC cases. So while we have called out a number of them as between the briefing, as between our briefings in eHarmony and The Meet Group and my
10:17AM colleagues and his four defendants, there's probably between eight and ten cases that are cited that show that previously extraordinarily similar claims were found abstract, and we believe the same analogy works here, and I'm
10:17AM going to refer to three of them particularly.

In one case -- as this Court asked us three weeks ago to identify one case which was generally exemplary or what would be a handrail that this Court could rely upon in terms of
10:17AM understanding the sort of patent and the sort of argument that will be presented, and all six of the defendants chose the same case, that is *NetSoc v. Match Group*, the CAFC case in 2020. Match Group is obviously Match.com, which is
10:18AM also another internet dating website which

allows matching in known networks, just as the defendants here.

The Court "claimed that" -- the Court held that "the claimed invention of
10:18AM establishing a social network is an abstract idea." And with attention to the right side of the screen, that is precisely what this claim of the '875 patent does, it establishes a social network.
10:18AM *Walker Digital* from this Court in 2014 held "the controlled exchange of information about people historically practiced by matchmakers is abstract." So that case, while we were inclined to bring that to this Court's
10:18AM attention, we acknowledge it's not controlling, but it is a case which literally, just as eHarmony and Coffee Meets Bagel and others, are effectively matchmakers within a social network. They too -- *Walker Digital* is a great
10:19AM handrail for this Court.

Finally, *Jedi Technologies*, a District of Delaware case in 2017, held "that matching people based on geographic location is abstract." And so that, too, geographic
10:19AM location being part of the social network and

used in a number of places for the representative claims across all four of the patents, is particularly on point here.

And so all of which is to say we believe
10:19AM that the authority controlling and otherwise firmly establishes that these claims are directed to an abstract idea.

THE COURT: Mr. Grady, Wireless Discovery, in response to the Court's request,
10:20AM identified *DDR Holdings, LLC, versus Hotels.com* as an exemplary case for the patents at issue. Why are the asserted patents in this case not analogous to the patents in *DDR Holdings*?

MR. GRADY: If I may, Your Honor, I
10:20AM was just going to pass the podium to my colleague, Mr. Chakkalakel, and he was, I think, ready to answer that precise question in the context of *Alice* Step 2. Thank you.

THE COURT: Okay. Thank you.

10:20AM MR. CHAKKALAKAL: Good morning, Your Honor.

THE COURT: Before you start, you have 14 minutes and two seconds remaining.

MR. CHAKKALAKAL: Sure, Your Honor.
10:21AM Thank you.

Good morning, Your Honor. May it please the Court. I'm Noel Chakkalakal with Fish & Richardson for Defendants Coffee Meets Bagel, Grindr, Hily, and Down App.

10:21AM Your Honor, I'd like to go straight to the question you asked. Why is it that *DDR Holdings* does not apply in this case? *DDR Holdings*, what the Court found was that the patent specifically called out a -- basically a 10:21AM new approach to create a composite web page. What happened in *DDR Holdings* is the patentee -- the patent claimed a system by which you had a web page. Let's say you're on CNN or something like that, and you had an 10:22AM advertisement on that web page. If you click on the link to that advertisement, it would take you to the website of the advertisement, such as Amazon.com. The problem is that the host website, the original website, was losing 10:22AM the traffic because the person has now gone to a different website. So the original website wants to actually keep the traffic.

What the patentee did was developed a system where there was a composite web page 10:22AM created so that when you click the link, a

composite web page was created which still had information and locals and stuff from the original website while it also had the product that was being sold.

10:22AM And what the Court specifically said in that case was that this composite web page was what made it different, what took it out of the realm of being an abstract idea. Additionally, and I think this is very important, Your Honor, 10:23AM what the system did was to change the conventional way in which a system like this worked. Normally, you click the link and you go to the product seller's website. Instead of that happening, now you click the link and 10:23AM you're going to a composite web page. What -- the difference between *DDR Holdings* and the claims at issue here, in *DDR Holdings*, the claims actually claim this different, unconventional way of making the technology 10:23AM work.

We don't have that in this case, Your Honor. In this case, all the claims do is recite an abstract idea, and all the components and all the steps involved are purely 10:23AM conventional. They happen the way you would

expect them to work. There's nothing unconventional that happens.

With that said, Your Honor, let's go back to slide 15, please.

10:24AM So, Your Honor, here we're talking about what is an inventive concept. Why are we talking about an inventive concept? If the patent is directed to an abstract idea, as is the case here, there must be something in the 10:24AM claims that denotes an inventive concept. And that means, according to the Federal Circuit, a claim that recites an abstract idea but has some additional features to ensure that the claim is more than a drafting effort designed 10:24AM to monopolize the abstract idea.

And you can't just use generic computer components and say, "Okay. I used a computer, and therefore it's not abstract." The Supreme Court and progeny that follows from *Alice* is 10:24AM very clear that the computer has to be doing something different, something unexpected, something unconventional, or you have to improve the way the computer works. And that is simply not at issue here.

10:24AM Here, Your Honor, in the briefing,

Wireless Discovery identifies a few inventive concepts that we can tell. From the best we can tell, these are the inventive concepts that are being identified by Wireless Discovery:

10:25AM Easily exchanging contact and personal information over the internet for purposes of social interaction by way of mobile devices, using mobile devices that allow for discovery or personal attributes, discovery of personal 10:25AM attributes for purposes of exchanging contact information.

There are several problems with these inventive concepts, the first being they're merely rephrasing the abstract idea.

10:25AM On the next slide, the Federal Circuit has said you can't simply rephrase the abstract idea and call it an inventive concept, and that is precisely what Wireless Discovery has done here. They're not pointing to the claims and 10:25AM identifying specific claim elements and saying that this provides an inventive concept. What they're saying is that -- they're rephrasing the abstract idea to say it's inventive. That's not allowed. That's the first problem, 10:26AM Your Honor.

The second problem, and if we can go to the next slide, the second problem, Your Honor, is that they haven't shown that anything is actually unconventional. If you look at the
10:26AM briefing, they kind of make blanket statements and say these things are unconventional. But there is no explanation as to how, without limitations of hardware, brand, or exchanging personal information or allowing devices to be
10:26AM turned off while you find information relating to the user, there is no explanation as to how any of these things could be non-routine and unconventional.

Finally, Your Honor, in addition to
10:26AM having not explained it, it actually defies the record and logic. As of the time of these patents, as you can see on the screen, these technologies were known. Outlook, Facebook, Bluetooth, these technologies were known in the
10:27AM industry at the time. Everything that they've identified as potentially an inventive concept, such as with identification of hardware brand -- it's pretty obvious if you used Outlook in the 2000s, you could use it on
10:27AM various laptops. Didn't matter who the

manufacturer was.

And easily exchanging personal information? Again, you can do that with Outlook, and Outlook is -- was definitely
10:27AM available at the time of these patents.

Allowing for devices to be turned off. Your Honor, what this is, when you use a server, which is what their system calls for, information can be stored on the server. If
10:27AM you're using a laptop connected to a server and you backup information to the server, that information is available on the laptop as well. Again, at the time of this patent, these technologies were known, routine, and
10:28AM conventional. So they haven't identified -- in addition to the first two problems, the third problem is they actually haven't identified anything with evidence that it was unconventional.

Same thing is true with -- between module
10:28AM devices with different manufacturers. You can have different manufacturers with -- and they can communicate with each other. You could do that with regular cell phones in the early
10:28AM 2000s.

Your Honor, the inventive concept, the one they identified in the briefing, are, first of all, rephrasing the abstract idea.

Second, there's no argument to show that
10:28AM they're unconventional and nonroutine.

And third, logic and evidence would show that they were conventional and routine.

With that, Your Honor, I think unless you have any questions, I will reserve the rest of
10:28AM our time.

THE COURT: I believe that's all right. I don't have anymore questions for you. Thank you.

MR. CHAKKALAKAL: Thank you, Your
10:29AM Honor.

THE COURT: So, Mr. Ramey, how do you respond initially to the -- with respect to -- let's deal with the collateral estoppel first. There was no substantive response that the
10:30AM Court saw in the briefing.

MR. RAMEY: Your Honor, I'll make it easy for all the parties and defendants. If we haven't made that clear, we are not asserting Claims 1 through 9 against any of the
10:30AM defendants. We tend to think that would be a

hard pull, to get Claims 2 through 9 through any of the courts, based on Judge Albright's ruling, so we have made the decision not to assert those claims.

10:30AM THE COURT: Okay. I understand. You may continue.

MR. RAMEY: Thank you very much.

First, I'd like to thank the Court and its staff for helping us with the technical
10:30AM issue. We finally were able to get it worked out. Some pieces were missing from counsel table. We got it worked out, so I thank the Court's staff for that.

I'd like to begin today, Your Honor, by
10:30AM first focusing back on slide 2 where it talked about the asserted patents. As you heard, there are four asserted patents, and I'm going to refer to the last three digits: The '875, the '352, '267, and '397. And I agree we
10:31AM haven't asserted anything but the '875 against The Meet Group. But I put this slide on here really to reference the Court to the two smaller sentences below, that all of these patents claim priority from a provisional
10:31AM application, 61,010,891, filed January 10,

2008.

Why is that date important? Because for the purposes of this hearing, that's the earliest effective filing date for these patents. There's no other evidence in the records except for that provisional date, so that's the date from which we judge what was common and ordinary, what was to be understood. That's the date to choose from. It's the date when the cell phones that we had looked like what's on counsel's table right there. We didn't have smartphones back then. We had the old BlackBerrys, the old phones that we entered data into. It was very different back then, so that's the point from which we judge the claims, not from today's hindsight looking back. That's the date we want to look.

Based on that, Your Honor, we go to slide 3, and we have to find, therefore, clear and convincing evidence. Even though we're at a 12(b)(6) stage, pleading stage, that doesn't change the standard to find these claims unpatentable. We're still looking for clear and convincing evidence, and in fact, we get that from the *Berkheimer* case, 881 Fed.3d.

1360. Any fact pertinent to the invalidity conclusion must be proven by clear and convincing evidence. Nothing in the 101 analysis or anything else changes the fact that all the factual determinations must be by that clear and convincing evidence standard.

So if we could go on to slide 4, I want to talk a little bit -- what I think might help frame this discussion into something that's -- we're pro patentee, of course, but we're going to show what we think are the elements of these claims in all the patents that make these claims patentable, and that's the problem that was addressed by the patents in suit, Your Honor.

Now, the claims of the patent in suit are directed towards providing a solution in 2008 for a problem unique to the telecommunications industry. It was a problem unique to wireless devices. It was a problem unique to establishing a social network. I'm going to refer to documents from the Coffee Meets Bagel case, Your Honor, and that is Docket Number -- that case is 1:22-CV-478, so all docket numbers that are referred to come from that case, Your

Honor. My apologies on not having that handy.

From Document 13 at Column 2, lines 3 through 19, in the abstract and support for the claims, we define the focus in our briefing as discovery of other mobile devices for the exchange of personal information without being constrained by hardware compatibility issues inherent in mobile devices by different manufacturers.

And I think we can sum that up by going -- I'll address counsel's -- Defendants' arguments how we didn't point that out later on in the argument if that's okay with the Court, but I want to go straight to the claims and show the Court that the screening for every element in the claims, what we're really talking about is finding hardware solutions to this problem of establishing a social network on wireless devices.

If we can go to Claim 5 or slide 5, sorry, I've highlighted just portions of Claim 10 of the '875 patent. And I'll grant you, there's a lot of words in these claims, so that's why I had to condense it down to get on one slide. If you go to Claim 10 and start on

the slide, the bolded portion shows the elements we think are essential to finding these patent claims eligible.

There is no question. We agree with the Court if this was merely a patent for establishing a social network, there wouldn't be patentable subject matter. NetSoc sets that out. There's no question about that. What we've done here is we've added additional limitations, steps, and other hardware limitations. That means there's a very specific means and methods to get there to establishing that social network. We allowed users with mobile devices that may not be compatible to communicate with one another, and we've done that through providing an internet connection and a mobile telecommunications network providing -- providing a first user using a respective first mobile communications device and a second user using a respective second mobile communications device and then receiving via the computing device. And then on to the next bold, receiving via the computing device a unique hardware device identifier from all devices on the network.

And the next paragraph down, sending via the computing device to the second mobile communication device an invitation. And then down to the last one, connecting via the computing device the first user and the second user through the computing device for personal communication between the first user and the second user.

So what we've really done is we've established a telecommunications network in 2008 that wasn't available. And how do we know it wasn't available? And I think we can get there by going to slide 6.

And what this patent teaches, and what's not controverted anywhere in the record today, is this teaching on slide 6 from Document Number 17-5 at Column 1 lines 31 to 38, and I'm going to read just, Your Honor, the bold section into the record. "But there's no form of communication using mobile devices that allows discovery by personal attributes for the purpose of exchanging contact information. Furthermore, there is no available technology adapted for allowing mobile device users to easily exchange contact and/or related personal

information over the internet for the purposes of social interaction by way of mobile devices."

This is uncontroverted in the record. This is what the patent teaches. This is one of those patent teachings we'll talk about later, and at this point, that has to be overcome by clear and convincing evidence, which there's none in the record.

But taking all that aside, what does this get us to? It doesn't get us much, but if we go back quickly to slide 5, Your Honor, what we'll see here is if you look at the non-bolded portions, that's establishing a social network. And there's other elements that help make the social network better. In our mind, we've established a pretty good social network here, but we do it by using the hardware components, the two mobile devices, the internet connection, the other server or computer that's out there. Later on in the claim in a couple of seconds you'll see that we allow all that communication to occur. So this is a specific means.

So now if we go to Claim 7 or slide 7,

Your Honor, we'll see that if you look at the *McRo v. Bandai* case, 837 Fed.3d. 1299, we'll see that claims that are directed toward specific means and methods that improve relevant technologies have been found patentable.

The *McRo* case, Your Honor, if you remember, was that case where, basically, the automation of digital -- allowing computers to produce accurate and realistic lip synchronization and facial expressions in their main characters that could previously only be done by humans. Basically, variables that computers did the District Court found unpatentable, and the Federal Circuit, when they looked at it, said there's enough there and specific steps that were taken, there were enough rules in place that they had to measure certain things and take certain measurements here or apply certain principles here, that was enough to make that patentable. We contend that for these same reasons, the claims of the '875 patent and those that depend therefrom --

THE COURT: Let me ask you this: What about -- what in the '875 patent makes

these claims novel or inventive? Aren't they really just citing generic computer technology?

MR. RAMEY: Your Honor, and I think if we were looking at an *Alice* Step 2 question of whether or not there's an inventive aspect to the claims, I would think that's it. Here, I think these are patentable at Step 1 because they're an improvement to the establishment of a social network using telecommunications equipment. In our minds, the novelty question was handled by the USPTO in the combination of the elements, so the novelty of the combination as a whole. And whether or not they were conventional, I would contend that they're not in the order that they're put because if we look back at 2008, what we were using, we weren't doing that. They weren't, I would contend, conventional in 2008.

Thank you, Your Honor.

If we can go on to slide 8, and most importantly, I think, from looking at these claims, if you just look at Claim 10 of the '875, one of the larger concerns from *Alice* was this issue of preemption that arises when claims are directed to more than just a

specific invention instead and properly try to monopolize entire fields of scientific and technological endeavors.

And I contend we don't have that here with the patents in suit because these claims, while they're broad in a certain sense, they're very limited how the social network is established and what would be infringing the social network. I'm not saying that there wouldn't be means you could operate underneath these patents. You could operate from a computer, but the patents offer specific means to find infringement, so they don't attempt to preempt all creations of a social network. You would never run into that problem here. They're very technologically driven on what it requires. There's steps and means to get there.

I wanted to then take the Court, if I could, through the other three patents' independent claims briefly. And I'm doing this, one, as both kind of an answer to show the different elements to the Court, but also to address the defendants' briefing on the 101 issue where they said that we haven't shown --

we haven't shown that Claim 10 of the '267 patent wasn't representative, at least from Fish & Richardson's briefing, and I wanted to show that we will show that each of the claims do have distinct elements and we think that each claim can be judged on its own and shouldn't be judged by one representative claim.

So I'll go to claim -- slide 9 now, if I could, and I'm looking at Claim 1 of the '352 patent, Your Honor. And this claim is, again, going to be directed to the same physical elements that are used. The same specific means and technological improvements are applied to the social network in getting to the inventive concept. It's a system comprising a computing device configured to communicate with various mobile and terminal devices followed by a bunch of social network stuff and then a first user using a respective first mobile communications device and a second user using a respective second mobile communications device, each capable of connecting to the internet through any of mobile telecommunications provider networks in a local area access

wireless network. Say that three times fast. Wherein said computing device being in communication with the first and second mobile communication devices through the internet connection via an application installed on the respective first and second mobile communication device of the users.

Here, right now, Claim 1 of the '352, we've introduced the element of application. That wasn't present in the '875. That's a very distinct thing, something we consider a key to patent eligibility that should be judged alone. That's just the large example from this patent.

And then the -- I won't read the next section as closely, but that's the big difference we see from here and why these elements, again, make it stand out for being patent eligible.

If we can go to slide 10, Your Honor, I'll try not to spend as long on the next ones. In general, I bolded the issues on the slides.

Claim 1 of the '267 patent provides a system comprising a computing device configured to communicate with various mobile and terminal devices to manage introduction and connection

of members. Again, we have a computing device communicating with various mobile devices. That sounds like a telecommunications network to me, not a social network. We have a telecommunications network that's applied to the social network to solve a problem in the industry.

And a first mobile communications device communicatively linked to said communications device and a second mobile communications device communicatively linked to said communicating device. It goes on to -- I won't read the rest. It goes on to provide how that happens over the internet and how it happens through the internet connection and communicating with one other to help find different members on there.

Again, we would say this one is, again, providing the standard that's closer to the '875 but, again, distinct enough to stand on its own for purposes of patent eligibility.

If we could go to slide 11, the last claim that I'll talk about independently, Your Honor, is Claim 1 of the '397 patent, and that patent is directed to a server configured to

communicate with a first communication device of a first user and a second communication device of a second user over communication links comprising a cellular network wherein the server comprises a processor configured to -- and we talk about storing data, about a profile, which we don't need to get into. Again, here we have a telecommunications network with communicating devices for establishing a social network. Not just establishing a social network. We have something physical attacking the problem that existed in 2008 with these wireless devices.

We talk about more steps with the unique identifier and the second member finding the profile, but then we get down to the bolded, and the processer is to disclose non-social-network attributes. So that the processer does this from this and then it allows disconnected devices to be discoverable by the server, which we think that is something unique. That wasn't in the '875 patent, so we don't think the '875 or the '267 alone should be the claim that stands for all the other claims. Each claim is independent and should

stand or fall on its own.

If I could, then, I'd like to go to slide 12, and I know I've been talking a lot this whole time about other cases and other things that apply here. I want to now tie that back into why we think *DDR Holdings* is so important for our case. Yes, we think under *McRo*, where a patent owner is Step 1 -- we think under *DDR Holdings* we're a patent holder under Step 1, and if you consider it a Step 2 case, a Step 2 case. *DDR Holdings* just says in *DDR Holdings*. In the present case, there's no allegation that the claims in the patent in suit are an algorithm, nor are they fundamental economic or business practice. Here, the claims are directed to a business challenge: How to allow wireless devices to connect to one other and allow sharing information without requiring device hardware compatibility. This is back in 2008. This is back when things didn't work like they do now. This is back in the infancy of this time, and that sort of -- I was pulling off the cases from 773 Fed.3d. at 1257, the *DDR Holdings* case from this particular cite.

If you go to slide 13, this solution from

2008 includes connecting the first and second wireless device, very general terms, through a server or a processer, thereby removing the issue of device compatibility and allowing the exchange of information. That's from 773 at 125758 DDR. That was our CEG, what that might be, which then we allow matches the first and second user further based on proximity and personal attributes just to give it more robustness in the the claims. We do define "social network" after that.

I will go to slide 14, Your Honor. In summary, the claims of the patent in suit are different enough in substance from those of *NetSoc v. Match* as they do not broadly and generically claim the practice of a business method, creation of a social network, without incidental added activity, i.e. the requirement of wireless devices, the server a computer, internet, or telecommunications network, all communicating with the first and second user who wants to exchange information, personal attributes, but may not be able to because of device hardware compatibility.

On slide 15, unlike in *NetSoc*, the

interactions -- just as an aside, Your Honor, I was the attorney who lost on *NetSoc*. I'm familiar with that case. Unlike *NetSoc*, the interactions creating the social network are manipulated to yield the desired result, allowing connection of devices without requiring hardware compatibility, a result that overrides any consideration that this is a routine and conventional sequence of events ordinarily encountered in forming a social network in 2008.

THE COURT: I understand.

MR. RAMEY: Your Honor, if I have a couple minutes left of my 30 minutes.

THE COURT: Yes.

MR. RAMEY: I wanted to address a couple of the defendants' issues raised in the briefing. I wanted to address the proposition from Defendant citing *Affinity Labs* for the proposition that limiting claims to a particular technological environment does not make them patentable. And I would just say that case, we haven't -- that case was about a case where -- the broadcast of regional broadcast content was limited to just cell

phones. It wasn't broadcast across the internet, it was just cell phones. What that's talking about is limiting the use. Here, we're talking about applying wireless
10:51AM telecommunications technology to a establishing a social network to solve the problem, so that case isn't on point.

The second issue I briefly want to address is the defendants assert that we
10:51AM haven't found our focus from the claims. We looked at the specification. I think today's talk showed you we looked directly at the claims. All the bolded sections is where we got our focus, and I do want to add that
10:51AM *Phillips* commands us, when we're construing the claims, to look at the specification to see what the claims mean, and that's what we did to find -- breathe life into the claims.

Last, on slide 18, Defendants' assertion
10:52AM that plaintiff has not provided inventive concepts that would confer eligibility ignores the clear and convincing standard that factual evidence provided by the plaintiff, if undisputed, must be taken as true, especially
10:52AM when there's no evidence to the contrary.

Further, as in *DDR Holdings*, the claims of the patents in suit include additional features that we've talked about a lot today that ensure the claims are more than just an
10:52AM attempt to monopolize the creation of a social network, as they do not preempt all social networks. That cite was from 773 Fed.3d. at 1259.

Because of that -- sorry, Your Honor, if
10:52AM I look at this real quick and make sure I get what my client wants me to say.

So I -- the one thing I think -- going -- I think all of this is understood just to reiterate that device discovery did not exist.
10:53AM We had that in our patent specification. Device discovery didn't exist until the creation of these patent applications. GPS and location of users was not a technology to associate matches prior to these patents in
10:53AM 2008, so that would be another one. The Microsoft Outlook, the Facebook that you saw, and I can't remember the other symbol at the bottom, none of those existed on a wireless device at the time. These were computer-based.
10:53AM What we're talking about is we took a

technological solution to the social networking problem applying to the telecommunications industry in allowing members to connect.

And with that, I'll go to slide 19 and
10:54AM conclude my presentation. Just to say the claims of the patents in suit are directed to patent-eligible subject matter, Your Honor. With that, I'll reserve the rest of the time if we need any rebuttal.

10:54AM THE COURT: No, you addressed my questions in the argument. I was going to ask you about *NetSoc*, and you addressed it.

MR. RAMEY: Thank you very much, Your Honor.

10:54AM MR. GRADY: Your Honor, Doug Grady again for eHarmony and The Meet Group. I'd like to tackle some of these arguments in opposition.

First of all, there is a reference, a
10:54AM number of times, to the specification, both in the briefing as well as in the plaintiff's slide deck. And I think it's very well established that the specification is not the claim, and if we had any drumbeat that we
10:55AM should have brought out earlier today, it's

that this is not a battle of specifications. It's a battle of claims. The Court must look only to the claims to determine patent eligibility with regard to 101. It's certainly
10:55AM true the specification can inform many of the claims, but the specification can't be the basis for a 101 -- to overcome a 101 argument.

And I would point the Court to *ChargePoint*, the CAFC case that said
10:55AM dramatically even a specification full of technical details that -- about a physical invention may nonetheless conclude with claims that claim nothing more than the broad law or abstract idea underlying the claims, and I
10:56AM think that's very well-trodden CAFC authority.

Secondly, I acknowledge that the claims as published, that one can dramatize them in such a way to make them look robust. The simple truth is if we handed out pads and
10:56AM pencils and papers today, we could make all of this and all of the claims across all of the patents happen quite easily. We could match each other in social networks, and that is the sort of technology, or more succinctly patent
10:56AM claims, that are historically patent

ineligible. If it can be performed in the human mind or by using pen and paper, it's clearly not patent eligible.

Now, it is certainly true that there are some common -- excuse me. It is true that there are computer elements, computer technology, integrated into those claims. And to that and other related assertions, I point the Court towards, again, *NetSoc*, particularly at 549, and that's where the CAFC almost precisely handrails an argument that we have made here. This Court asked, and I did not hear, and to the extent that I did hear it, I disagree, if there was an inventive concept in the claims sufficient to transform the abstract idea, and we didn't see anything on the board and we didn't hear anything identified.

I acknowledge, because the inventor is here, that there are a number of things in the specification that include things that were at the leading edge in 2008. They were all in existence, but they were all there. But *NetSoc* hits those head on. It's certainly the truth that stating an abstract idea while adding words that are effectively "apply it with a

computer," those are not sufficient to overcome a 101 objection.

Now, that's the sort of thing particularly called out on representative Claim 10 of the '875 patent on your left, connecting via the computing device. A computing device. Unique device. Hardware. The question is whether there's a technological improvement to the computer or otherwise providing something more to transform the claims into something that's patent eligible.

And we went hunting for limitations. We went hunting for sub-limitations and could find nothing that transformed. And Your Honor asked for that, and I acknowledge that there are things that are computing devices, but that's just the computing devices. It's not the something more the Federal Circuit has required to transform it into something that's a patent-eligible invention.

Before I hand off to my colleague, I'd like to briefly mention preemption. It is not -- it should not be lost on this Court that almost every internet dating entity has been named, either here or in the Western District

of Texas or other places, certainly all of the large ones. And that's preemption per se. It's what *Alice* was expecting and intending to preclude. It expected that, yes, there are -- if you were to narrow the claims with a technological improvement, you were entitled to a patent. You were entitled to jump over the 101 threshold. But if you simply call out something that could be done with conventional computer tools, then what you're really doing is preempting the ability for companies and individuals to invent inside of that rubric.

So here, effectively, there is no space, if this patent is eligible, to further invent within the construct of the social networking. It is preemption per se in the sense when viewed in light of *Alice* and its progeny. It's precisely the sort of patent that the Court of Appeals for the Federal Circuit expected and intended would never issue.

With that, I'll hand off to my colleague.

MR. CHAKKALAKAL: Noel Chakkalakal again, Your Honor. Before I start, I just would like to ask Your Honor if you have any specific questions. I will be try to quick

about the issues we have to cover, but I know we're short on time.

THE COURT: I don't have any other questions for you specifically. You have less than a minute.

MR. CHAKKALAKAL: Let me be very quick. I want to quickly state, Your Honor, opposing counsel brought up novelty. Novelty is not an issue at 101. The fact they did something that hasn't been done before, while we disagree that's not an issue for us here, as the Court has explained, novelty is not a concern for 101.

The next thing I want to mention, the state of the art. They mention the state of the art. I would like to switch to -- this is paragraph two from the provisional application that they mentioned, the original provisional application. And you can see in the middle it says, "Networks such as Outlook, Myspace, Facebook, et cetera." That gives you an idea of the state of the art that we were dealing with at the time. That was conventional at the time. Think about what Facebook, Outlook Myspace were doing at the time. That's in the

provisional application.
The last thing I want to hit on, Your Honor, really quickly is *DDR Holdings*, and they mention using a server. But one of the things
11:02AM that we have to remember, they didn't identify something analogous to what *DDR Holdings* did, which is using this composite web page, something different. What they're using is a server, and they're using it in a conventional
11:03AM manner. The server is doing exactly what you expect it to do, and they haven't shown any nonroutine or nonconventional aspects of it.
Furthermore, Your Honor, to the extent they're arguing that the server is an
11:03AM intermediary, that specific kind of argument was specifically used in *Alice*. Using an intermediary in the claim doesn't make it nonconventional or nonroutine. You have to show something else. The arguments that
11:03AM they've presented here have already been addressed by various Courts.
Furthermore, Your Honor, just one last thing I will say is that they mention doing it -- they're taking stuff and doing it in a
11:03AM wireless environment. That is directly

addressed by the *Affinity Labs* case, which is you can't take technology and apply it to a new environment, like wireless devices, and say it's new. That doesn't take it from being
11:04AM patent-ineligible to patent-eligible. That is simply changing the environment in which you're using the technology.
THE COURT: I see.
MR. CHAKKALAKAL: That's all. Thank
11:04AM you.
THE COURT: Thank you.
MR. RAMEY: Your Honor, Bill Ramey again. I'm going to probably go against my better advice. I was wanting to respond to a
11:04AM bunch I heard, but I think, Your Honor, unless you have any questions for me, I think the record is pretty full on the issue.
I would just say that the comment was made about a lot of lawsuits. I'm not sure how
11:04AM that's relevant. We have a very narrow invention that's claimed. It doesn't claim that all social networking -- these social networks work from terminals and telecommunications devices. We don't cover
11:05AM half of what the matching programs do. We

would only cover the infringement portion of the devices communicating with each other, not someone on a terminal device. It has to be a wireless device.
11:05AM The fact that it doesn't cover everything the websites are doing, it doesn't cover all aspects. These websites provide tons of features that we don't cover with the patents. We cover some of the features, no question, but
11:05AM not all the features.
The novelty comment was brought up in a question -- and wait. I can't read my own handwriting, Your Honor. I'm going to move on to the next point. Sorry.
11:05AM But just -- okay. That -- I think that's pretty good. I think I'll just rest unless the Court has any further questions.
THE COURT: I don't have any further questions for you. With respect to -- you
11:06AM acknowledge that the provisional patent application did refer to Myspace, Outlook, and Facebook?
MR. RAMEY: That's what my comment said. Thank you. I couldn't read my
11:06AM handwriting. Yes, we admit those existed.

Those existed on a terminal, on a desktop. It wasn't a wireless device, so it wasn't on wireless devices.
Outlook, Myspace, those one-on-one, this
11:06AM is what we were dealing with back then. That didn't communicate in that particular manner back in 2008, and there's no evidence in the record to the contrary, and at the 12(b)(6) stage, we stand on the undisputed record. It
11:06AM could be later on that we develop a factual record to challenge that, but right now we just don't have anything in the factual record that would change that position.
I think the best way to consider these is
11:07AM they were listed as things -- systems or services you could log into to extract content from and not wireless social network sites, but we do admit that they existed on terminal devices. We just think that we provided a
11:07AM different solution to the industry.
Thank you, Your Honor.
THE COURT: All right. I understand both sides' arguments. We will take it under advisement and issue rulings as soon as we can.

C E R T I F I C A T E

STATE OF DELAWARE)
) ss:
COUNTY OF NEW CASTLE)

I, Deanna L. Warner, a Certified Shorthand Reporter, do hereby certify that as such Certified Shorthand Reporter, I was present at and reported in Stenotype shorthand the above and foregoing proceedings in Case Number 22-481-GBW, *WIRELESS DISCOVERY LLC vs. GRINDR, INC.*, heard on December 14, 2022.

I further certify that a transcript of my shorthand notes was typed and that the foregoing transcript, consisting of 53 typewritten pages, is a true copy of said MOTIONS TO DISMISS.

SIGNED, OFFICIALLY SEALED, and FILED with the Clerk of the District Court, NEW CASTLE County, Delaware, this 1st day of February, 2023.

_____
Deanna L. Warner, CSR, #1687

Speedbudget Enterprises, LLC

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Phone: (302) 893-1158 E-mail: deanna@speedbudget.biz

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTIRCT OF DELAWARE

WIRELESS DISCOVERY LLC, **Plaintiff,**	)	
	)	**Civil Action No. _____**
v.	)	
THE MEET GROUP, INC., **Defendants.**	)	
	)	**JURY TRIAL DEMANDED**

PLAINTIFF'S ORIGINAL COMPLAINT

Plaintiff Wireless Discovery LLC ("Wireless Discovery") files this Original Complaint and demand for jury trial seeking relief from patent infringement of the claims of 9,264,875 ("the '875 patent") (referred to as the "Patent-in-Suit") by The Meet Group, Inc. ("Defendant" or "The Meet Group").

I. THE PARTIES

1. Wireless Discovery LLC is a Delaware limited liability corporation with its principal address of P.O. Box 1435, Los Gatos, CA 95124.

2. On information and belief, The Meet Group, Inc. is a corporation organized and existing under the laws of Delaware, having its principal place of business at at 100 Union Squire Drive, New Hope, Pennsylvania 18938.

3. Defendant can be served through their registered agent, Corporation Serivce Company located at 251 Little Falls Drive, Wilmington, Delaware 19808, at its place of business, or anywhere ese it may be found.

4. On information and belief, Defendant sells and offers to sell products and services throughout Delaware, including in this judicial district, and introduces products and services that perform infringing methods or processes into the stream of commerce knowing that they would be sold in Delaware and this judicial district.

II. JURISDICTION AND VENUE

5. This Court has original subject-matter jurisdiction over the entire action pursuant to 28 U.S.C. §§ 1331 and 1338(a) because Plaintiff's claim arises under an Act of Congress relating to patents, namely, 35 U.S.C. § 271.

6. This Court has personal jurisdiction over Defendant because: (i) Defendant is present within or has minimum contacts within the State of Delaware and this judicial district; (ii) Defendant has purposefully availed itself of the privileges of conducting business in the State of Delaware and in this judicial district; and (iii) Plaintiff's cause of action arises directly from Defendant's business contacts and other activities in the State of Delaware and in this judicial district.

7. Venue is proper in this district under 28 U.S.C. §§ 1391(b) and 1400(b). Defendant has committed acts of infringement and has a regular and established place of business in this District. Further, venue is proper because Defendant conducts substantial business in this forum, directly or through intermediaries, including: (i) at least a portion of the infringements alleged herein; and (ii) regularly doing or soliciting business, engaging in other persistent courses of conduct and/or deriving substantial revenue from goods and services provided to individuals in Delaware and this District.

III. INFRINGEMENT

A. Infringement of the '875 Patent - SKOUT

8. On February 16, 2016, U.S. Patent No. 9,264,875 ("the '875 patent", included as an attachment) entitled "Location-Based Discovery of Network Members by Personal Attributes For Alternate Channel Communication" was duly and legally issued by the U.S. Patent and Trademark Office. Plaintiff owns the '875 patent by assignment.

9. The '875 patent related to novel and improved systems and methods for location-based discovery of network members.

10. The '875 patent's Abstract states, "User mobile devices are equipped to discover each other through an ad hoc network, based on their location and proximity or based on mobile network reporting to one another. Locations may be reported through global positioning methods and cross-referenced by other users. Following discovery and consent, the mobile devices are connected to one another via various means, other than the ad hoc network, and utilize functions provided by services such as SMS, E-mail, chat/instant messaging, multimedia, or video. The users may be members of a common social network, and can thereby exchange social network attributes."

11. The Meet Group, Inc. is listed as distributing company for Skout, for example, including but not limited to on Apple App Store and on Google Play Store. On information and belief, The Meet Group, Inc. sells, markets and distributes Skout.

12. Defendant maintains, operates, and administers products and services that facilitate location-based discovery of network members that infringe one or more of claims 1-20 of the '875 patent, literally or under the doctrine of equivalents. Defendant put the inventions claimed by the '875 patent into service (i.e., used them); but for Defendant's actions, the claimed-inventions

embodiments involving Defendant's products and services would never have been put into service. Defendant's acts complained of herein caused those claimed-invention embodiments as a whole to perform, and Defendant's procurement of monetary and commercial benefit from it.

13. Support for the allegations of infringement may be found in the following exemplary table included as Exhibit A. These allegations of infringement are preliminary and are therefore subject to change.[1]

14. Defendant has caused and will continue to cause Plaintiff damage by direct infringement of the claims of the '875 patent.

B. Infringement of the '875 Patent - TAGGED

15. On February 16, 2016, U.S. Patent No. 9,264,875 ("the '875 patent", included as an attachment) entitled "Location-Based Discovery of Network Members by Personal Attributes For Alternate Channel Communication" was duly and legally issued by the U.S. Patent and Trademark Office. Plaintiff owns the '875 patent by assignment.

16. The '875 patent related to novel and improved systems and methods for location-based discovery of network members.

17. The '875 patent's Abstract states, "User mobile devices are equipped to discover each other through an ad hoc network, based on their location and proximity or based on mobile network reporting to one another. Locations may be reported through global positioning methods and cross-referenced by other users. Following discovery and consent, the mobile devices are connected to one another via various means, other than the ad hoc network, and utilize functions

[1] Plaintiff reserves the right to amed to assert indirect and willful infringement claims based on post-filing knowledge of the patent, as well as based on pre-suit knowledge if discovery reveals an earlier date of knowledge.

provided by services such as SMS, E-mail, chat/instant messaging, multimedia, or video. The users may be members of a common social network, and can thereby exchange social network attributes."

18. The Meet Group, Inc. is listed as distributing company for Tagged, for example, including but not limited to on Apple App Store and on Google Play Store. On information and belief, The Meet Group, Inc. sells, markets and distributes Tagged.

19. Defendant maintains, operates, and administers products and services that facilitate location-based discovery of network members that infringe one or more of claims 1-20 of the '875 patent, literally or under the doctrine of equivalents. Defendant put the inventions claimed by the '875 patent into service (i.e., used them); but for Defendant's actions, the claimed-inventions embodiments involving Defendant's products and services would never have been put into service. Defendant's acts complained of herein caused those claimed-invention embodiments as a whole to perform, and Defendant's procurement of monetary and commercial benefit from it.

20. Support for the allegations of infringement may be found in the following exemplary table included as Exhibit B. These allegations of infringement are preliminary and are therefore subject to change.[2]

21. Defendant has caused and will continue to cause Plaintiff damage by direct infringement of the claims of the '875 patent.

IV. JURY DEMAND

Plaintiff hereby requests a trial by jury on issues so triable by right.

[2] Plaintiff reserves the right to amed to assert indirect and willful infringement claims based on post-filing knowledge of the patent, as well as based on pre-suit knowledge if discovery reveals an earlier date of knowledge.

V. PRAYER FOR RELIEF

WHEREFORE, Plaintiff prays for relief as follows:

a. enter judgment that Defendant has infringed the claims of the '875 patent;

b. award Plaintiff damages in an amount sufficient to compensate it for Defendant's infringement, in an amount no less than a reasonable royalty or lost profits, together with pre-judgment and post-judgment interest and costs under 35 U.S.C. § 284;

c. award Plaintiff an accounting for acts of infringement not presented at trial and an award by the Court of additional damage for any such acts of infringement;

d. declare this case to be "exceptional" under 35 U.S.C. § 285 and award Plaintiff its attorneys' fees, expenses, and costs incurred in this action;

e. declare Defendant's infringement to be willful and treble the damages, including attorneys' fees, expenses, and costs incurred in this action and an increase in the damage award pursuant to 35 U.S.C. § 284;

f. a decree addressing future infringement that either (i) awards a permanent injunction enjoining Defendant and its agents, servants, employees, affiliates, divisions, and subsidiaries, and those in association with Defendant from infringing the claims of the Patents-in-Suit, or (ii) awards damages for future infringement in lieu of an injunction in an amount consistent with the fact that for future infringement the Defendants will be an adjudicated infringer of a valid patent, and trebles that amount in view of the fact that the future infringement will be willful as a matter of law; and,

g. award Plaintiff such other and further relief as this Court deems just and proper.

DATED: April 13, 2022

Respectfully submitted,

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IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

WIRELESS DISCOVERY LLC,	)	
	)	
Plaintiff,	)	
	)	
v.	)	C.A. No. 22-484 (VAC)
	)	
THE MEET GROUP, INC.,	)	
	)	
Defendant.	)	

DEFENDANT THE MEET GROUP, INC.'S
OPENING BRIEF IN SUPPORT OF MOTION TO DISMISS

Dated: June 09, 2022

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II. NATURE AND STAGE OF PROCEEDINGS

Wireless Discovery sued TMG on April 13, 2022. (D.I. 1.) The sole count of Wireless Discovery's complaint is for infringement of the '875 Patent. (*Id.* ¶¶ 8–21.) In that count, Wireless Discovery accuses TMG of "maintain[ing], operat[ing], and administer[ing] products and services . . . that infringe one or more of claims 1–20 of the '875 patent." (*Id.* ¶¶ 12, 19.) The complaint incorporates "exemplary table[s]" that illustrate Wireless Discovery's infringement contentions for claim 10 only. (*Id.* ¶¶ 13, 20; D.I. 1-1, 1-2.)

III. SUMMARY OF ARGUMENT

Wireless Discovery's complaint should be dismissed with prejudice because:

1. Independent claim 1 of the '875 Patent has already been held invalid for indefiniteness. *Wireless Discovery LLC v. Bumble Trading Inc.*, No. 6:20-cv-00762, D.I. 43 at 5 (W.D. Tex. Nov. 18, 2021) (attached as Exhibit A). Claims 2 through 9 are also invalid for indefiniteness because they "incorporate the elements of independent claim 1." *Ibormeith IP, LLC v. Mercedes-Benz USA, LLC*, 732 F.3d 1376, 1378 (Fed. Cir. 2013). TMG "may reap the benefit of the invalidity decision under the principles of collateral estoppel." *Pharmacia & Upjohn Co. v. Mylan Pharm., Inc.*, 170 F.3d 1373, 1379 (Fed. Cir. 1999) (quotation omitted); *see also Uniloc 2017 LLC v. Zenpayroll, Inc.*, C.A. No. 19-1075-CFC-SRF, 2021 WL 271800, at *5 (D. Del. Jan. 27, 2021).

2. Claims 10 through 20 of the '875 Patent "are directed to a patent-ineligible concept." *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208, 218 (2014). More specifically, the claims are directed to "the abstract idea of automating the conventional establishment of social networks to allow humans to exchange information and form relationships." *NetSoc, LLC v. Match Grp., LLC*, 838 F. App'x 544, 548 (Fed. Cir. 2020). The claims are doubly abstract because the claimed social network "match[es] people based on criteria such as . . . location," which is itself an abstract

idea. *Jedi Techs. Inc. v. Spark Networks Inc.*, C.A. No. 16-1055-GMS, 2017 WL 3315279, at *7 (D. Del. Aug. 3, 2017); *see also Perry St. Software, Inc. v. Jedi Techs., Inc.*, 548 F. Supp. 3d 418, 433 (S.D.N.Y. 2021) (holding "[m]atching based on geographic location" is an abstract idea under Section 101).

3. Claims 10 through 20 of the '875 Patent further lack "an inventive concept sufficient to transform the claimed idea into a patent-eligible application." *Alice*, 573 U.S. at 221 (internal quotation marks omitted) (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 79-80 (2012)). The claims recite a "generic computer system" that "could be replaced with a human matchmaker who compares two individuals based on submitted or publicly available information, and then sends both chatters a message which prompts their meeting." *Jedi Techs.*, 2017 WL 3315279, at *8; *see also Perry St.*, 548 F. Supp. 3d at 436 (holding "general steps for how individuals are matched or introduced" in "internet chatrooms" lack inventive concept).

IV. STATEMENT OF FACTS

A. The '875 Patent Describes a Social Network That Runs on Standard "Cellular Technology," "Bluetooth Technology," and "Wi-Fi"

The '875 Patent purports to address a "need . . . to exchange customized information such as pictures, social network profiles, emails and phone numbers using [] mobile devices." (D.I. 1-3 at 1:27–30.) The patent describes a social network that enables "mobile device users" to "offer to other, nearby users, their pictures or other information as part of a discovery process," to "save contacts received from other users," and to "keep contacts stored on a mobile device up to date." (*Id.* at 2:24–28.) This contact information may be exchanged through "social cards," which "include social profiles, emails, phone numbers and/or a picture." (*Id.* at 3:39–41.)

On the social network, users are matched by location through a "standard Bluetooth discovery process" that runs on "existing standard Bluetooth technology." (*Id.* at 2:43–44, 3:17–

recited in claims 11 through 19—providing, receiving, reporting, sending, obtaining, and updating data—mirror these examples.

Claim 10, a method claim, is also representative of independent claim 20, a "machine readable medium" claim. A method claim is representative of "a claim to a 'tangible computer readable storage medium'" containing code for executing the method. *Kaavo Inc. v. Cognizant Tech. Sols. Corp.*, C.A. No. 14-1192-LPS-CJB, 2016 WL 476730, at *15 (D. Del. Feb. 5, 2016) (citing *Alice*, 573 U.S. at 226). The medium of claim 20 "stor[es] instructions that, when executed by a computing device, cause the computing device to perform" the method of claim 10. Therefore, if claim 10 is patent-ineligible, then claim 20 is likewise patent-ineligible.

C. The '875 Patent Fails *Alice* Step One Because the Claims are Directed to the Abstract Idea of Social Networking, Including Matching People by Location

The '875 Patent fails *Alice* step one because the claims are directed to "the abstract idea of automating the conventional establishment of social networks to allow humans to exchange information and form relationships." *NetSoc*, 838 F. App'x at 548. The claims are further demonstrably abstract because the social network "match[es] people based on criteria such as . . . location," which is itself an abstract idea. *See Jedi Techs.*, 2017 WL 3315279, at *7; *see also Perry St.*, 548 F. Supp. 3d at 433 (holding "[m]atching based on geographic location" an abstract idea).

Claim 10 of the '875 Patent demonstrates the abstract nature of the claims. Claim 10 recites a method that can be distilled down to seven generic steps: [10.1] providing "user profile information" about two users of "mobile communications devices," [10.2] receiving "indications" of the devices' locations, [10.3] receiving "identifiers" of all devices on a "social network," [10.4] sending one user's "invitation" to exchange information with another user, [10.5] connecting users for "personal communication," [10.6] transmitting information from one user's "social network file" to the other user's device, and [10.7] disclosing "social network attributes" of users who are

"in the vicinity of or within a particular distance from" each other. This is mere automation of conventional social networking, including matching people based on criteria such as location, that can be and has been performed by a human with pen and paper, i.e., a human matchmaker. *See CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1373 (Fed. Cir. 2011) (finding claims directed to patent ineligible subject matter because they could "be performed in the human mind, or by a human using a pen and paper"); *see also Reputation.com, Inc. v. Birdeye, Inc.*, C.A. No. 21-129-LPS-CJB, 2022 WL 609161, at *14 (D. Del. Jan. 31, 2022) (explaining it is "a sign that the patent is directed to an abstract idea" if the claimed methods "'can be performed entirely in the human mind'" (quoting *CyberSource*, 654 F.3d at 1373); *see also Versata Dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1333 (Fed. Cir. 2015) (noting that "Courts have examined claims that required the use of a computer and still found that the underlying, patent-ineligible invention could be performed via pen and paper or in a person's mind").

References to sending, receiving, and processing data do not save the claims. In *NetSoc*, for example, the court held that "the claimed invention of establishing a social network is an abstract idea" even though the claims included data-processing steps:

> The claim limitations of "maintaining" a list of participants, "presenting" a user with selectable categories, "receiving" the user's category selection, "receiving" an inquiry from the user, "selecting" a participant to receive the user's inquiry, "sending" the inquiry to the participant, "receiving" a response to the inquiry from the participant, "publishing" the response, and "tracking" feedback of the participants . . . are directed to automating a longstanding, well-known method of organizing human activity, similar to concepts previously found to be abstract.

838 F. App'x at 550; *see also SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1167 (Fed. Cir. 2018) ("[C]laims focused on collecting information, analyzing it, and displaying certain results of the collection and analysis are directed to an abstract idea."). Matching social network users by location is no different. "Updating information based on a person's location, and filtering and

summarizing that information . . . based on a person's preferences or needs" are abstract ideas that have long been "performed by a variety of individuals or entities, such as . . . online services." *Brit. Telecomm. v. IAC/InterActiveCorp*, 381 F. Supp. 3d 293, 312 (D. Del. 2019). The social networking idea claimed in the '875 Patent, including its data-processing steps, is equally abstract.

D. The '875 Patent Fails *Alice* Step Two Because the Claims, Which are Performed Using Generic Computing Tools, Lack an Inventive Concept

The '875 Patent fails *Alice* step two because the claims "mere[ly] recit[e] a generic computer," which is not an inventive concept that could "transform a patent-ineligible abstract idea into a patent-eligible invention." *Alice*, 573 U.S. at 223.

There is no inventive concept when the claims can be performed with "off-the-shelf, conventional computer, network, and display technology for gathering, sending, and presenting" data. *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1355 (Fed. Cir. 2016). In the social networking context, a claim lacks an inventive concept when it is directed to a "generic computer system" that "could be replaced with a human matchmaker who compares two individuals based on submitted or publicly available information, and then sends both chatters a message which prompts their meeting." *Jedi Techs.*, 2017 WL 3315279, at *8. Likewise, a claim that merely "recite[s] general steps for how individuals are matched or introduced" in "internet chatrooms" lacks an inventive concept. *Perry St.*, 548 F. Supp. 3d at 436.

The '875 Patent claims lack an inventive concept for similar reasons. The patent describes a social networking process that employs "available technology and standard protocols available today," including a "standard cell phone," a "cellular phone network," "existing standard Bluetooth technology," and "Wi-Fi." (D.I. 1-3 at 2:31, 2:43–44, 2:50, 4:17–20, 11:45–46.) These technologies and protocols could be replaced with a human matchmaker who finds people in close proximity, introduces them to each other, and encourages them to chat. Confirming as much, the

patent allows that the process may take place in a "social atmosphere" or in a "business setting such as a meeting, trade show, conference, etc." (*Id.* at 5:20–22.)

Indeed, the '875 Patent's disclosure makes clear that its claims pre-empt the idea of social networking, including matching people by location. For example, the '875 Patent broadly states that the "invention" is "capable of being implemented on almost ***any type*** of mobile communication device, e.g., a standard cell phone." (D.I. 1-3 at 2:47–50) (emphasis added). The '875 Patent continues, boasting that "while the invention is described as implemented using Bluetooth technology . . . [o]ther wireless technologies can be used, including, but not limited to, cellular technology, Wi-Fi, Wi-Max, IEEE 802.11 technology, radio frequency (RF) communications, Infrared Data Association (IrDA) compatible protocols, Local Area Networks (LAN), Wide Area Networks (WAN), and Shared Wireless Access Protocol (SWAP), and Personal Area Networks (PAN)." (*Id.* at 2:57–3:3.) By broadly and expressly indicating that the "invention" can be implemented on any type of mobile device and via all known communications protocols, the '875 Patent directly implicates the Supreme Court's "pre-emption concern that undergirds [the] § 101 jurisprudence." *Alice*, 573 U.S. at 223.

While the claimed invention is intended to overcome "security constraints . . . and/or related hardware compatibility issues between mobile devices," that intended result is not an inventive concept. A result-oriented "purported feature of the invention cannot supply an inventive concept" without "an explanation of the 'mechanism' for 'how the result is accomplished.'" *Intellectual Ventures I LLC v. Erie Indem. Co.*, 850 F.3d 1315, 1331–32 (Fed. Cir. 2017) (quoting *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1348 (Fed. Cir. 2015)). No such mechanism is claimed, or even disclosed, here. Claim 10 recites that users engage in "personal communication" by standard "SMS, E-mail, chat/instant messaging, multimedia, voice or video."

(D.I. 1-3 at 18:5–6.) The claim does not describe any mechanism for engaging in this communication, or how this communication allegedly overcomes security constraints and compatibility issues. *Realtime Data LLC v. Array Networks Inc.*, 556 F. Supp. 3d 424, 437 (D. Del. 2021) ("The patentee had ideas about data compression, but rather than claim specific implementations of those ideas or provide new techniques to achieve the claimed results, the patentee sought and received claims on the ideas themselves. The patents claim abstract ideas without teaching how to implement those ideas. This is what § 101 jurisprudence prohibits."). The '875 Patent's silence on these issues confirms that the claims lack an inventive concept.

VI. CONCLUSION

Claims 1 through 9 of U.S. Patent No. 9,264,875 have been held invalid for indefiniteness, and claims 10 through 20 of the '875 Patent are invalid for being directed to patent-ineligible subject matter. Because every claim of the '875 Patent is invalid, Wireless Discovery's patent infringement complaint (D.I. 1) should be dismissed with prejudice.

Dated: June 09, 2022

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Attorneys for The Meet Group, Inc.

Exhibit A

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION

WIRELESS DISCOVERY LLC, *Plaintiff*	§	
	§	
	§	**6:20-CV-00762-ADA**
-v-	§	
	§	
BUMBLE TRADING INC., BUMBLE HOLDING LTD., BADOO TRADING LTD., MAGIC LAB CO., WORLDWIDE VISION LIMITED, BADOO LIMITED, BADOO SOFTWARE LIMITED, BADOO TECHNOLOGIES LIMITED, CHAPPY LIMITED, LUMEN APP LIMITED *Defendants*	§	

CLAIM CONSTRUCTION ORDER

The Court held a *Markman* hearing on November 18, 2021. During that hearing, the Court provided its final constructions. The Court now enters those claim constructions.

SIGNED this 18th day of November, 2021.

ALAN D ALBRIGHT
UNITED STATES DISTRICT JUDGE

Term	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Preliminary Construction
#2: (1) "each [mobile communications device] operatively connected to any of a mobile telecommunications provider network and an internet connection to access said computing device" and (2) "said computing device connects said first mobile communications device and said second mobile communications device to the internet" '875 patent claim 1	Definite	Indefinite	Indefinite.
#3: "based on a latest static and dynamic location" ('267 patent claims 1, 10; '397 patent claims 1,9)	No construction necessary	"based on both a latest static and dynamic location"	Plain-and-ordinary meaning
#4: "to select members that said first user may wish to connect with" ('267 patent claims 1, 10)	No construction necessary	"in order to allow the first user to select members that said first user may wish to connect with"	Plain-and-ordinary meaning

Case: 23-1582 Document: 33 Page: 171 Filed: 10/04/2023

THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

WIRELESS DISCOVERY LLC	)	
	)	
Plaintiff,	)	**Civil Action No. 22-484 (VAC)**
v.	)	
	)	
THE MEET GROUP, INC.,	)	
	)	
Defendant.	)	
	)	

PLAINTIFF'S RESPONSE TO DEFENDANT
THE MEET GROUP, INC.'S MOTION TO DISMISS

Plaintiff Wireless Discovery LLC ("Plaintiff" or "Wireless") files this Response to The Meet Group, Inc.'s ("Defendants" or "TMG") Motion to Dismiss For Failure to State a Claim and Brief in Support Thereof ("Motion") [1] showing the Court that it should be denied because Wireless's patent claims are patent eligible.

I. BACKGROUND

On April 13, 2022, Plaintiff Wireless filed its Original Complaint[2] against TMG for infringement of claims of U.S. Patent No. 9,264,875 ("the '875 Patent"). Defendant seeks dismissal and alleges claims 1-9 of the '875 Patent have already been held invalid and claims 10-20 of the '875 Patent are invalid under 35 U.S.C. § 101. Defendant's Motion to Dismiss should be denied.

II. STANDARD FOR PATENABLE SUBJECT MATTER

The Supreme Court articulated a two-step "framework for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts."[3] At step one, the court must determine whether the claims are directed to one of the three patent-ineligible concepts.[4] If not, "the claims satisfy [Section] 101 and [the court] need not proceed to the second step."[5] If the claims are directed to a patent-ineligible concept, the court must proceed to the second step of identifying an "inventive concept i.e., an element or combination of elements that is sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself."[6]

---

[1] Doc. Nos. 12 and 13.
[2] Doc. No. 1.
[3] *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 573 U.S. 208, 217, 134 S. Ct. 2347 (2014); *see also Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 77-78, 132 S. Ct. 1289 (2012).
[4] *Alice*, 573 U.S. at 217.
[5] *Core Wireless Licensing S.A.R.L. v. LG Elecs., Inc.*, 880 F.3d 1356, 1361 (Fed. Cir. 2018).
[6] *Alice*, 573 U.S. at 217-18 (quoting *Mayo*, 566 U.S. at 72-73).

At step one, "the claims are considered in their entirety to ascertain whether their character as a whole is directed to excluded subject matter."[7] However, "courts must be careful to avoid oversimplifying the claims by looking at them generally and failing to account for the specific requirements of the claims."[8]

At step two, the court must "look to both the claim as a whole and the individual claim elements" to determine whether they "amount[ ] to significantly more than a patent upon the ineligible concept itself"[9] "Simply appending conventional steps, specified at a high level of generality, [is] not enough to supply an inventive concept."[10] Instead, the claim elements must involve more than performance of "well-understood, routine, [and] conventional activities previously known to the industry."[11] "The inventive concept inquiry requires more than recognizing that each claim element, by itself, was known in the art. . . . [A]n inventive concept can be found in the non-conventional and non-generic arrangement of known, conventional pieces."[12]

Applying these standards, the claims of the '875 patent are patent eligible.

III. THE FOCUS OF THE CLAIMED ADVANCE OVER THE PRIOR ART ESTABLISHES THE CLAIMS ARE DIRECTED TO PATENTABLE SUBJECT MATTER

[7] *Internet Patents Corp, v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015); *see also Affinity Labs of Texas, LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1257 (Fed. Cir. 2016) ("*DIRECTV*") ("The 'abstract idea' step of the inquiry calls upon us to look at the 'focus of the claimed advance over the prior art' to determine if the claim's 'character as a whole' is directed to excluded subject matter.").
[8] *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1313 (Fed. Cir. 2016) (internal quotation marks omitted). "At step one, therefore, it is not enough to merely identify a patent-ineligible concept underlying the claim; [courts] must determine whether that patent-ineligible concept is what the claim is 'directed to.'" *Rapid Litig. Mgmt. Ltd. v. CellzDirect, Inc.*, 827 F.3d 1042, 1050 (Fed. Cir. 2016).
[9] *McRO*, 837 F.3d at 1312.
[10] *Alice*, 573 U.S. at 222
[11] *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1367 (Fed. Cir. 2018) (citation and internal quotation marks omitted); *see also Mayo*, 566 U.S. at 73.
[12] *BASCOM Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1350 (Fed. Cir. 2016).

The Claims of the '875 patent are directed to improvements in exchanging information using mobile communications devices, in particular discovering members of a social network by associating their personal attributes to the mobile communications devices for purposes of exchange.[13] The '875 patent's specification teaches the claimed solution for exchanging such information was not available prior to the invention of the claims of the '875 patent:

> There are methods to exchange contact information in the form of Vcards. But there is no form of communication using mobile devices that allows discovery by personal attributes for the purpose of exchanging contact information. Furthermore, there is no available technology adapted for allowing mobile device users to easily exchange contact and/or related personal information over the internet for the purpose of social interaction by way of mobile devices.

[14] Further, there is no record evidence of the claimed solution existing prior to the invention of the claims of the '875 patent and thus there is no record evidence that the claimed improvement for exchanging information using mobile communications devices were conventional at the time of the invention.

A. The Claims of the '875 Patent Are Directed to Concrete Steps

To properly evaluate whether asserted claims "are directed to a patent-eligible concept,"[15] a court must examine "the focus of the claimed advance over the prior art to determine if the character of the claim as a whole, considered in light of the specification, is directed to excluded subject matter."[16] In other words, abstractness is determined by analyzing the claim as a whole, not whether each element standing alone is abstract.[17] Taking the claim as a whole, the focus of the claims is "discovery of other mobile devices for the exchange of personal information without

[13] Doc. No. 1-3 at Column 1, lines 16-22 ("1:-16-22").
[14] *See id.* at 1:31-38.
[15] *Alice Corp. Pty. Ltd.*, 573 U.S. at 218.
[16] *Trading Techs. Int'l, Inc. v. IBG LLC*, 921 F.3d 1084, 1092 (Fed. Cir. 2019).
[17] *See e.g., Alice Corp.*, 574 U.S. 208, 219, 134 S. Ct. 2347, 2359 (2014); *Eyetalk365, LLC v. Zmodo Tech. Corp.*, 356 F. Supp. 3d 1059, 1067 (D. Nev. 2018).

constrained by hardware compatibility issues inherent in mobile devices by different manufacturers.[25]

B. Claim 10 of the '875 Patent Provides Sufficient Granularity

Claim 10 of the '875 Patent recites:

> 10. A method comprising:
>
> providing, via a computing device, accessible through any of an internet connection and a mobile telecommunications provider network, access to stored user profile information about a first user using a respective first mobile communications device and a second user, using a respective second mobile communications device;
>
> receiving, via the computing device, indications of the locations of the first and second mobile communications devices;
>
> receiving, via the computing device, a unique device hardware identifier from all communications devices from all users linked in a social network to associate with profiles and authenticate when users sign in to a user account;
>
> sending, via the computing device, to the second mobile communications device, an invitation to accept any of an invitation to connect and personal attribute information from, or share personal attribute information with, the first user, upon receipt of permission from the second user to receive personal attribute information about, or share personal attribute information with, the first user; and
>
> connecting, via the computing device, the first user and the second user through the computing device for personal communication between first user and the second user, the personal communication comprising one or more SMS, E-mail, chat/instant messaging, multimedia, voice or video,
>
> wherein the computing device is configured to locate information about the second user from a social network file of the second user, and transmit this information to the first mobile communications device, and
>
> wherein the first and second users are members of a same social network, and the computing device is operable to disclose social network attributes such as a picture, name, and a location of first and second users in the vicinity or within a particular distance from one another for the purpose of connecting members.[26]

[25] Doc. No. 1-3 at 2:3-19, Abstract and Claims, *generally*.
[26] Doc. No. 1-3, claims.

human mind. Defendant further misses the mark by its citation to *NetSoc, LLC v. Match Grp., LLC*, 838 F. App'x 544 (Fed. Cir. 2020)[45] as the claims in that case were directed towards only the establishment of a social network. The claims in *Netsoc* did not provide a technical solution for discovery of other mobile devices for the exchange of personal information without being constrained by hardware compatibility issues inherent in mobile devices by different manufacturers as do the claims of the '875 patent.[46]

IV. THERE ARE INVENTIVE ASPECTS OF THE '875 PATENT THAT PRECLUDE DISMISSAL AT THIS STAGE

A. Factual Allegations in the Patent Specification Preclude Judgment.

To evaluate whether asserted claims satisfy *Alice*'s second step of "search[ing] for an 'inventive concept,'"[47] a court considers "the elements of each claim both individually and as an ordered combination to determine whether the additional elements transform the nature of the claim into a patent-eligible application."[48] While a court may determine patent eligibility at the Rule 12(b)(6) stage, it is "only when there are no factual allegations that, taken as true, prevent resolving the eligibility question as a matter of law."[49] "Plausible factual allegations may preclude dismissing a case under § 101."[50] All facts pertinent to the eligibility question must be proven by clear and convincing evidence.[51] Here, Plaintiff makes numerous factual allegations in the patent specification that are not rebutted by Defendant.

Even if this Court determines Plaintiff's claims are directed towards an abstract idea, patent eligibility is possible if the abstract idea include[s] 'additional features' to ensure that the claim is

[45] Counsel for Plaintiff is very familiar with the *Netsoc* case as he was lead counsel.
[46] Doc. No. 1-3 at 2:3-19, Abstract and Claims, *generally*.
[47] *Alice*, 573 U.S. at 217, 134 S.Ct. 2347
[48] *BSG Tech LLC v. BuySeasons, Inc.*, 899 F.3d 1281, 1289 (Fed. Cir. 2018)
[49] *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1125 (Fed. Cir. 2018).
[50] *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1125 (Fed. Cir. 2018).
[51] *HP Inc.*, 881 F.3d at 1368 citing *Microsoft Corp. v. i4i Ltd. P'ship*, 564 U.S. 91, 95 (2011).

present claims allow the exchange of information where it would otherwise be impossible and thus are patent eligible.[64]

As in *Messaging Gateway Solutions*, the claims here are directed as a whole to a "specific problem arising in the realm of "electronic commerce" with "multiple vendors using multiple service providers"[65] Traditionally users were required to register with multiple communication protocols, such as Blue tooth and the like to exchange information between mobile devices, just like how in *Messaging*, traditionally "phones could not send SMS text messages to computers."[66] Thus, here the claimed invention "overrides conventional practice."[67] Here, the specification provides concrete examples of how to practice the claims tethering the solution "to the technology that created the problem." For the same reason, the claims of the '875 Patent avoid the disqualifying problem identified in *Alice*, preempting the abstract idea of mediated electronic transactions.[68]

The preset claims therefore, when "taken together as an ordered combination, ... recite an invention that is not merely the routine or conventional," allowing the exchange of information between mobile communications devices with different manufacturers.[69] The claims do not try to pre-empt every use of a social network, but rather recite a specific way to facilitate the exchange

[64] *See id*.
[65] Doc. No. 1-1 at Doc. No. 1-1 at 1:29-31, Abstract and Claims, *generally*.
[66] *Messaging Gateway Solutions, LLC v. Amdocs, Inc.*, No. 14-732-RGA, 2015 U.S. Dist. LEXIS 49408, at *16 (D. Del. Apr. 15, 2015).
[67] *Messaging Gateway Solutions, LLC v. Amdocs, Inc.*, No. 14-732-RGA, 2015 U.S. Dist. LEXIS 49408, at *15 (D. Del. Apr. 15, 2015).
[68] It is important to note that Plaintiff does not admit its claims are abstract and only provides this argument if the Court finds the claims abstract.
[69] Doc. No. 1-3 at 2:3-19, Abstract and Claims, *generally*.

of information between mobile devices thus claiming additional features that render the claims patent eligible.[70]

V. CONCLUSION

For the foregoing reasons, Wireless Discovery LLC respectfully asks the Court to deny Defendant's Motion to dismiss. Alternatively, to the extent the Court grants the Motion, Wireless asks that the Court does so without prejudice and allows Wireless leave to amend.[71]

July 7, 2022

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[70] *See, e.g., DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1259 (Fed. Cir. 2014).

[71] Fed. R. Civ. P. 15(a)(2) (allowing a party to amend is pleading with the Court's leave); see Standing Order Governing Proceedings (OGP) 4.0 - Patent Cases (allowing plaintiff to amend pleadings without leave in early stages of the litigation, so long as the amendment does not add new patents or patent claims); see *BillJCo, LLC v. Apple Inc.*, No. 6:21-cv-00528-ADA, 2022 WL 299733 at *9 (W.D. Tex. Feb. 1, 2022) (allowing plaintiff to re- plead contributory and willful infringement claims based on pre-suit knowledge, if able, based on fact discovery). *Sys. v. Regions Fin. Corp.*, No. 6:20-cv-003220-ADA, 2020 U.S. Dist. LEXIS 200484 at *7-8 (W.D. Tex. Oct. 28, 2020).

THE CHONG LAW FIRM, P.A.

Licensed in: Delaware, New Jersey, Pennsylvania

November 30, 2022

VIA E-FILE
The Honorable Gregory B. Williams
U.S. District Court
District of Delaware

Re: Wireless Discovery LLC v. Coffee Meets Bagel, Inc.; Case No. 1:22-cv-00478-GBW
Wireless Discovery LLC v. Down App, Inc.; Case No. 1:22-cv-00479-GBW
Wireless Discovery LLC v. Eharmony, Inc.; Case No. 1:22-cv-00480-GBW
Wireless Discovery LLC v. Grindr, Inc.; Case No. 1:22-cv-00481-GBW
Wireless Discovery LLC v. Hily Corp.; Case No. 1:22-cv-00482-GBW
Wireless Discovery LLC v. The Meet Group, Inc.; Case No. 1:22-cv-00484-GBW

Dear Judge Williams:

We write on behalf of the Plaintiff in the above-captioned matters in response to this court's oral order to identify which U.S. Supreme Court or Federal Circuit case(s) Plaintiff contends is most similar to the patents at issue.

DDR Holdings, LLC v. Hotels.com, 773 F.3d 1245 (Fed. Cir. 2014), is similar to the patents at issue. In *DDR Holdings*, the Federal Circuit examined whether a software-related invention is patentable. The Court found that the claims contained an inventive concept, and distinguished this case from the numerous other software-related cases that were not patent eligible. More specifically, the Court found that the claims "do not merely recite the performance of some business practice known from the pre-Internet world along with the requirement to perform it on the Internet." Instead, the claims are "necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer network."

Similarly, the claims of the Asserted Patents do not merely recite the performance of social networking from the pre-Internet world along with the requirement to perform it on the Internet. Instead, the claims necessarily use computer technology in order to, for example, discover members of a social network and the respective locations of their communication devices.

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Attachment: *DDR Holdings, LLC v. Hotels.com*, 773 F.3d 1245 (Fed. Cir. 2014)

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delay in the onset of SJIA because certain regulatory cells and inflammatory mediators in the body that are also purportedly active in response to an antigen may counteract the effects of cytokines, and admitted that "none of this was measured in" Vanessia. J.A. 232. We find the Special Master's conclusion that Dr. McCabe's explanation lacked sufficient support neither arbitrary nor capricious.

Thus, while we find fault with aspects of the Special Master's *Althen* analysis, we ultimately affirm his decision to deny compensation to Koehn. We agree that Koehn did not sufficiently establish why onset of SJIA can occur within seven months after receiving the first dose of Gardasil, especially when cytokine release is generally a more immediate response.

AFFIRMED.

COSTS

No costs.

MOORE, Circuit Judge, concurring.

I join fully in the majority's analysis of the third *Althen* prong. I recognize the strength of the reasons cited by the majority for being troubled by the Special Master's analysis on the first and second *Althen* prongs. I do not believe, however, that they present adequate grounds for reversal given the highly deferential standard of review we must apply.

DDR HOLDINGS, LLC,
Plaintiff–Appellee,

v.

HOTELS.COM, L.P., Cendant Travel Distribution Services Group, Inc., Expedia, Inc., Travelocity.Com, L.P., Site59.Com, LLC, International Cruise & Excursion Gallery, Inc., Ourvacationstore, Inc., Internetwork Publishing Corporation, and Orbitz Worldwide, LLC, Defendants,

and

National Leisure Group, Inc. and World Travel Holdings, Inc.,
Defendants–Appellants,

and

Digital River, Inc., Defendant.

No. 2013–1505.

United States Court of Appeals,
Federal Circuit.

Dec. 5, 2014.

Background: Patentee brought infringement action against competitors, alleging infringement of patents relating to an e-commerce system and method providing hosts with transparent, context sensitive e-commerce supported pages. After a jury returned a verdict against competitors, competitors filed renewed motions for judgment as a matter of law (JMOL), and one competitor moved for a new trial. The United States District Court for the Eastern District of Texas, Rodney Gilstrap, J., 954 F.Supp.2d 509, denied motion. Competitors appealed.

Holdings: The Court of Appeals, Chen, Circuit Judge, held that:

(1) asserted claims of one patent were invalid as anticipated;

(2) asserted claims of patents were not so manifestly abstract as to render them

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invalid for failing to claim patentable subject matter;

(3) patent was not invalid for indefiniteness; and

(4) substantial evidence supported finding of direct infringement by second competitor.

Affirmed in part, reversed in part, and remanded.

Mayer, Circuit Judge, filed dissenting opinion.

1. Federal Courts ⚿3605

Court of Appeals reviews the denial of a motion for judgment as a matter of law de novo.

2. Federal Civil Procedure ⚿2142.1, 2152, 2608.1

Judgment as a matter of law is appropriate if the facts and inferences point so strongly and overwhelmingly in favor of one party that the court concludes that reasonable jurors could not arrive at a contrary verdict.

3. Federal Courts ⚿3672

In reviewing the denial of a motion for judgment as a matter of law, Court of Appeals must presume that the jury resolved all factual disputes in the prevailing party's favor.

4. Patents ⚿488

A patent claim is anticipated if a single prior art reference expressly or inherently discloses every limitation of the claim. 35 U.S.C.A. § 102(a).

5. Patents ⚿485

Anticipation challenges must focus only on the limitations actually recited in the patent claims. 35 U.S.C.A. § 102(a).

6. Patents ⚿1970(5)

Whether a reference discloses a patent claim limitation is a question of fact reviewed for substantial evidence.

7. Patents ⚿577

Invalidity of a patent by anticipation must be proven by clear and convincing evidence. 35 U.S.C.A. § 102(a).

8. Patents ⚿581

Clear and convincing evidence in the record established that competitor's prior art secure sales system anticipated the asserted claims of patent relating to an e-commerce system and method providing hosts with transparent, context sensitive e-commerce supported pages, and thus patent was invalid as anticipated; like the patented system, competitor's system generated webpages that allowed website visitors to purchase and download digital products of their choice, but still retained the look and feel of the host's site. 35 U.S.C.A. § 102(a).

9. Patents ⚿1970(3)

Court of Appeals reviews the district court's determination of patent eligibility de novo. 35 U.S.C.A. § 101.

10. Patents ⚿452

To distinguish patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts, courts first determine whether the claims at issue are directed to one of those patent-ineligible concepts, and if so, then consider the elements of each claim—both individually and as an ordered combination—to determine whether the additional elements transform the nature of the claim into a patent-eligible application of that abstract idea. 35 U.S.C.A. § 101.

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11. Patents ⚿455

Recitation of generic computer limitations does not make an otherwise ineligible claim patent-eligible. 35 U.S.C.A. § 101.

12. Patents ⚿462

Claims of patents relating to an e-commerce system and method providing hosts with transparent, context sensitive e-commerce supported pages, that involved storing and serving webpages having the similar look and feel of another and different webpage, disclosed a specific set of physical linkages that involved a data store, server, computer, that together, and through the claimed interconnectivity, accomplished the process of displaying composite webpages having the look and feel of the source web page, and therefore the claims satisfied the machine-or-transformation test, and were not so manifestly abstract as to render them invalid for failing to claim patentable subject matter. 35 U.S.C.A. § 101.

13. Federal Courts ⚿3635

Patent indefiniteness is a question of law that Court of Appeals reviews de novo. 35 U.S.C.A. § 112.

14. Patents ⚿816

Definiteness requirement for patents focuses on whether a patent's claims, viewed in light of the specification and prosecution history, inform those skilled in the art about the scope of the invention with reasonable certainty; the inquiry trains on the understanding of a skilled artisan at the time of the patent application. 35 U.S.C.A. § 112.

15. Patents ⚿818

When a patent claim term depends solely on the unrestrained, subjective opinion of a particular individual purportedly practicing the invention, without sufficient guidance in the specification to provide objective direction to one of skill in the art, the term is indefinite. 35 U.S.C.A. § 112.

16. Patents ⚿822

Phrase "look and feel" had an established, sufficiently objective meaning in the art, and thus patent relating to an e-commerce system and method providing hosts with transparent, context-sensitive e-commerce supported pages, which used such phrase consistent with that meaning was not invalid for indefiniteness. 35 U.S.C.A. § 112.

17. Patents ⚿1828(2)

Substantial evidence supported jury's verdict of direct infringement as to the "look and feel" elements of patent relating to an e-commerce system and method providing hosts with transparent, context-sensitive e-commerce supported pages; jury had published images of all nine website pairs as evidence before it to make the ultimate factual determination that the look and feel of the host corresponded to the accused websites, and patentee presented expert testimony comparing the website pairs for substantial similarities and listing out the similarities in a demonstrative exhibit before the jury.

18. Federal Courts ⚿3618

Court of Appeals reviews a district court's award of prejudgment interest for an abuse of discretion.

19. Interest ⚿39(2.20)

Prejudgment interest should ordinarily be awarded after a finding of patent infringement, absent some justification for withholding such an award. 35 U.S.C.A. § 284.

Patents ⚿2091

6,629,135. Cited.

Patents ⚿2091

6,993,572. Invalid.

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Patents ⚿2091

7,818,399. Infringed.

Louis J. Hoffman, Hoffman Patent Firm, of Scottsdale, AZ, argued for Plaintiff–Appellee. On the brief was Ian B. Crosby, Susman Godfrey LLP, of Seattle, WA.

Norman H. Zivin, Cooper & Dunham LLP, of New York, NY, argued for Defendants–Appellants, National Leisure Group, Inc., et al. With him on the brief was Tonia A. Sayour.

Before WALLACH, MAYER, and CHEN, Circuit Judges.

Opinion for the court filed by Circuit Judge CHEN.

Dissenting opinion filed by Circuit Judge MAYER.

CHEN, Circuit Judge.

Defendants–Appellants National Leisure Group, Inc. and World Travel Holdings, Inc. (collectively, NLG) appeal from a final judgment of the United States District Court for the Eastern District of Texas entered in favor of Plaintiff–Appellee DDR Holdings, LLC (DDR). Following trial, a jury found that NLG infringes the asserted claims of U.S. Patent Nos. 6,993,572 (the '572 patent) and 7,818,399 (the '399 patent). The jury also found the asserted claims of the '572 and '399 patents are not invalid. The district court denied NLG's renewed motion for judgment as a matter of law (JMOL) on, *inter alia*, noninfringement and invalidity of the asserted patents. The district court subsequently entered a final judgment consistent with the jury's findings on infringement, validity, and damages, and awarded DDR pre- and post-judgment interest and costs. We affirm the district court's denial of NLG's motions for JMOL of noninfringement and invalidity of the '399 patent. Because we conclude that the '572 patent is anticipated as a matter of law, we reverse the district court's denial of JMOL on the validity of the '572 patent, and remand to the district court for further proceedings consistent with our decision.

I. Background

DDR is the assignee of the '572 and '399 patents. The '572 and '399 patents are both continuations of U.S. Patent No. 6,629,135 (the '135 patent), which has a priority date of September 17, 1998. Each of these patents is directed to systems and methods of generating a composite web page that combines certain visual elements of a "host" website with content of a third-party merchant. For example, the generated composite web page may combine the logo, background color, and fonts of the host website with product information from the merchant. '135 patent, 12:46–50.

The common specification of the patents-in-suit explains that prior art systems allowed third-party merchants to "lure the [host website's] visitor traffic away" from the host website because visitors would be taken to the third-party merchant's website when they clicked on the merchant's advertisement on the host site. *Id.* at 2:26–30. The patents-in-suit disclose a system that provides a solution to this problem (for the host) by creating a new web page that permits a website visitor, in a sense, to be in two places at the same time. On activation of a hyperlink on a host website—such as an advertisement for a third-party merchant—instead of taking the visitor to the merchant's website, the system generates and directs the visitor to a composite web page that displays product information from the third-party merchant, but retains the host website's

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"look and feel." *Id.* at 3:9–21. Thus, the host website can display a third-party merchant's products, but retain its visitor traffic by displaying this product information from within a generated web page that "gives the viewer of the page the impression that she is viewing pages served by the host" website. *Id.* at 2:56–63, 3:20–22.

Representative claim 13 of the '572 patent recites:

13. An e-commerce outsourcing system comprising:

a) a data store including a look and feel description associated with a host web page having a link correlated with a commerce object; and

b) a computer processor coupled to the data store and in communication through the Internet with the host web page and programmed, upon receiving an indication that the link has been activated by a visitor computer in Internet communication with the host web page, to serve a composite web page to the visitor computer wit[h] a look and feel based on the look and feel description in the data store and with content based on the commerce object associated wit[h] the link.

System claim 13 requires that the recited system provide the host website with a "link" that "correlate[s]" the host website with a "commerce object." The "commerce object" is the product or product catalog of the merchant. '135 patent, 3:7–13. After recognizing that a website visitor has activated the link, the system retrieves data from a "data store" that describes the "look and feel" of the host web page, which can include visual elements such as logos, colors, fonts, and page frames. *Id.* at 12:46–50. The claimed system then constructs a composite web page comprising a "look and feel" based on the look and feel description in the data store along with content based on product information from the associated merchant's product catalog.

The '399 patent is directed to a similar system with a greater emphasis on a "scalable [computer] architecture" to serve "dynamically constructed [web] pages" associated with multiple host website and merchant pairs. '135 patent, 3:32–36. Representative claim 19 of the '399 patent recites:

19. A system useful in an outsource provider serving web pages offering commercial opportunities, the system comprising:

(a) a computer store containing data, for each of a plurality of first web pages, defining a plurality of visually perceptible elements, which visually perceptible elements correspond to the plurality of first web pages;

(i) wherein each of the first web pages belongs to one of a plurality of web page owners;

(ii) wherein each of the first web pages displays at least one active link associated with a commerce object associated with a buying opportunity of a selected one of a plurality of merchants; and

(iii) wherein the selected merchant, the out-source provider, and the owner of the first web page displaying the associated link are each third parties with respect to one other;

(b) a computer server at the outsource provider, which computer server is coupled to the computer store and programmed to:

(i) receive from the web browser of a computer user a signal indicating activation of one of the links displayed by one of the first web pages;

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(ii) automatically identify as the source page the one of the first web pages on which the link has been activated;

(iii) in response to identification of the source page, automatically retrieve the stored data corresponding to the source page; and

(iv) using the data retrieved, automatically generate and transmit to the web browser a second web page that displays: (A) information associated with the commerce object associated with the link that has been activated, and (B) the plurality of visually perceptible elements visually corresponding to the source page.

Similar to claim 13 of the '572 patent, system claim 19 of the '399 patent requires that a "data store" hold "visually perceptible elements" (or " 'look and feel' elements") that "visually . . . correspond" to a host web page. The host web page must include a link associated with a "buying opportunity" with a merchant. Once a visitor activates this link, the claimed system generates and transmits to the website visitor's web browser a composite web page that includes product information of the merchant and the "look and feel" of the host website (i.e., "the plurality of visually perceptible elements visually corresponding to the [host web] page").

Claim 19 further requires that the data store must store "look and feel" descriptions for multiple hosts and that each link must be associated with a particular merchant's product catalog. Claim 19 also requires that the merchant, system operator, and host website be "third parties with respect to one another." When a website visitor activates a link associated with a merchant's product catalog, the claimed system identifies the host web page and then transmits a composite web page using the proper "look and feel" elements of the host website in the data store and the product information from the associated merchant.

The '572 patent issued on January 31, 2006. On the same day, DDR filed suit against NLG, Digital River, Inc. (Digital River), and nine other defendants, asserting infringement of various claims of the '135 and '572 patents. NLG is a travel agency that sells cruises in partnership with travel-oriented websites and major cruise lines through the Internet. DDR's suit accused NLG of infringing the '135 and '572 patents by providing a system for cruise-oriented (host) websites that allows visitors to book cruises on major cruise lines (merchants). Joint Appendix (J.A.) 261. In particular, when a visitor on one of these cruise-oriented (host) websites clicks on an advertisement for a cruise, NLG's system generates and directs the visitor to a composite web page that incorporates "look and feel" elements from the host website and product information from the cruise line (merchant).

DDR's suit was stayed during the pendency of an *ex parte* reexamination of the '135 and '572 patents requested by DDR that was based on prior art identified by the defendants. Shortly after the U.S. Patent and Trademark Office confirmed the validity of the '135 and '572 patents and the stay was lifted, the '399 patent issued on October 19, 2010. DDR subsequently amended its complaint to assert infringement of this patent by several of the defendants, including NLG.

During *Markman* proceedings, the parties stipulated to a construction of several terms, including "look and feel," which appears in each of the asserted claims of the '572 patent, and "visually perceptible elements," which appears in each of the asserted claims of the '399 patent. J.A. 542. For "look and feel," the parties agreed to a

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construction of: "A set of elements related to visual appearance and user interface conveying an overall appearance identifying a website; such elements include logos, colors, page layout, navigation systems, frames, 'mouse-over' effects, or others elements consistent through some or all of the website." *Id.* For "visually perceptible elements," the parties agreed to a construction of: "look and feel elements that can be seen." *Id.* The defendants, however, expressly reserved their rights to argue that both the "look and feel" and "visually perceptible elements" terms are indefinite, but offered the stipulated constructions "in the alternative." *Id.*

Between June 2012 and January 2013, DDR settled with all defendants except for NLG and Digital River. The case eventually proceeded to a jury trial in October 2012. At trial, DDR accused NLG and Digital River of direct and willful infringement of claims 13, 17, and 20 of the '572 patent, and accused NLG—but not Digital River—of direct and willful infringement of claims 1, 3, and 19 of the '399 patent. DDR also accused NLG and Digital River of inducing infringement of claim 17 of the '572 patent.

The jury found that NLG and Digital River directly infringed the asserted claims of the '572 patent and that NLG directly infringed the asserted claims of the '399 patent, but that NLG and Digital River's infringement was not willful. The jury found that NLG and Digital River did not induce infringement of claim 17 of the '572 patent. The jury also found that the asserted claims were not invalid. The jury determined DDR was entitled to $750,000 in damages from both NLG and Digital River for infringing DDR's patents.

At the conclusion of trial, NLG and Digital River renewed motions for JMOL pursuant to Rule 50(b) of the Federal Rules of Civil Procedure (FRCP) on several grounds. NLG contended the asserted claims of the '572 and '399 patents are invalid under 35 U.S.C. § 101 because the claims are directed to patent-ineligible subject matter and invalid under 35 U.S.C. § 112 ¶ 2[1] because the terms "look and feel" and "visually perceptible elements" are indefinite. NLG also contended that neither the jury's finding of infringement nor its award of damages was supported by substantial evidence. NLG also alleged the district court made several unfair and prejudicial evidentiary rulings.

Digital River contended that the asserted claims of the '572 patent are invalid as either anticipated under 35 U.S.C. § 102, obvious under 35 U.S.C. § 103, or indefinite under 35 U.S.C. § 112 ¶ 2. Digital River also contended that the jury's finding of infringement was not supported by substantial evidence. Digital River moved for a new trial pursuant to FRCP 59.

The district court denied NLG and Digital River's motions for JMOL and Digital River's FRCP 59 motion for a new trial. Over the defendants' objections, the district court awarded DDR an additional $284,404 in prejudgment interest pursuant to 35 U.S.C. § 284. The district court entered a final judgment in favor of DDR, and NLG and Digital River timely appealed. NLG and Digital River's appeals were consolidated and fully briefed. Prior to oral argument, DDR and Digital River settled, and we granted Digital River's motion to terminate its appeal. D.I. 65, 68. NLG's appeal continued. We have

1. Paragraph 2 of 35 U.S.C. § 112 was replaced with newly designated § 112(b) when § 4(c) of the America Invents Act (AIA), Pub.L. No. 112–29, took effect on September 16, 2012. Because the applications resulting in the patents at issue in this case were filed before that date, we will refer to the pre-AIA version of § 112.

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jurisdiction pursuant to 28 U.S.C. § 1295(a)(1).

II. Discussion

[1–3] Since the denial of a motion for JMOL is not patent law-specific, regional circuit law applies. The Fifth Circuit reviews the denial of a JMOL motion *de novo*. *See, e.g., Harris Corp. v. Ericsson Inc.*, 417 F.3d 1241, 1248 (Fed.Cir.2005). In the Fifth Circuit, JMOL is appropriate if "the facts and inferences point so strongly and overwhelmingly in favor of one party that the court concludes that reasonable jurors could not arrive at a contrary verdict." *Id.* The Court "must presume that the jury resolved all factual disputes in the [prevailing party's] favor." *Transocean Offshore Deepwater Drilling, Inc. v. Maersk Drilling USA, Inc.*, 699 F.3d 1340, 1347 (Fed.Cir.2012) (applying Fifth Circuit law to the review of a district court's grant of JMOL).

A. Anticipation

[4–7] We turn first to the district court's denial of Digital River's motion for JMOL of invalidity of the '572 patent based on 35 U.S.C. § 102(a). A patent claim is anticipated if a single prior art reference expressly or inherently discloses every limitation of the claim. *See, e.g., Orion IP, LLC v. Hyundai Motor Am.*, 605 F.3d 967, 975 (Fed.Cir.2010). Anticipation challenges under § 102 must focus only on the limitations actually recited in the claims. *See Constant v. Adv. Micro–Devices, Inc.*, 848 F.2d 1560, 1570–71 (Fed. Cir.1988) (finding "limitations [ ] not found anywhere in the claims" to be irrelevant to an anticipation challenge). Whether a reference discloses a limitation is a question of fact, and a jury's findings on questions of fact are reviewed for substantial evidence. *See, e.g., Dawn Equip. Co. v. Ky. Farms Inc.*, 140 F.3d 1009, 1014 (Fed.Cir. 1998). Invalidity by anticipation must be proven by clear and convincing evidence. *See Microsoft Corp. v. i4i L.P.*, —— U.S. ——, 131 S.Ct. 2238, 2242, 180 L.Ed.2d 131 (2011).

On appeal, the parties only dispute whether Digital River's prior art Secure Sales System (SSS) satisfies the "look and feel" limitation; DDR does not dispute that the SSS satisfies every other limitation of the '572 patent's asserted claims. NLG, which adopted Digital River's anticipation challenge to the '572 patent,[2] argues that no evidence supports the jury's finding that the SSS does not disclose the "look and feel" limitation, since it showed the jury multiple examples of composite web pages generated by the SSS with a "look and feel" based on a set of "look and feel" elements from the corresponding host website.

2. Even though Digital River terminated its appeal prior to oral argument, it did not do so until after the parties had fully completed their briefing. In its own briefs, although only in footnotes, NLG incorporated by reference Digital River's arguments on anticipation. Appellant's Br. 43 n.23; Appellant's Reply Br. 9 n.5. In a consolidated case such as here, Rule 28(i) of the Federal Rules of Appellate Procedure (FRAP) permits "any party [to] adopt by reference a part of another's brief." *See, e.g., Pozen Inc. v. Par Pharm. Inc.*, 696 F.3d 1151, 1159 n. 3 (Fed.Cir.2012); *Aventis Pharma Deutschland GmbH v. Lupin, Ltd.*, 499 F.3d 1293, 1294 n. 1 (Fed.Cir.2007). *Compare Microsoft Corp. v. DataTern, Inc.*, 755 F.3d 899, 910 (Fed.Cir.2014) (co-parties in non-consolidated appeals cannot use incorporation pursuant to FRAP 28(i) to exceed word count limits prescribed by FRAP 32(a)(7)). DDR implicitly *concedes* that NLG has adequately adopted Digital River's anticipation defense as to the '572 patent, acknowledging that "[NLG] did not adopt Digital River's anticipation defense or seek to extend it to prove anticipation *of the '399 patent*, which has claims containing extra elements not found in the asserted claims of the '572 patent." Appellee's Br. 44 n.10 (emphasis added).

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DDR contends that, as the district court determined, "it is up to the trier of fact to determine whether the combination of elements making up the overall appearance of a website has a similar 'look and feel' as compared to another website." *DDR Holdings, LLC v. Hotels.com, L.P.*, 954 F.Supp.2d 509, 517 (E.D.Tex.2013). DDR contends that the jury reviewed substantial evidence that Digital River's SSS did not replicate the host website's "look and feel" in terms of "overall appearance" and that the web pages generated by the SSS did not show "correspondence of overall appearance." In particular, DDR argues that the SSS did not satisfy this limitation since it did not replicate a sufficient number of "look and feel" elements from the host web page. Appellee's Br. 45–46.

[8] We find that the record allows only one reasonable finding: clear and convincing evidence establishes that Digital River's prior art SSS anticipates the asserted claims of the '572 patent. The record lacks substantial evidence to support the jury's finding that the asserted claims of the '572 patent are not anticipated. Therefore, the district court erred by denying the defendants' motion for JMOL of invalidity of the '572 patent under 35 U.S.C. § 102(a).

Digital River's prior art SSS was operational and sold to its first customer by August 12, 1996. J.A. 6618–23. By August 1997, more than a year before the filing date of the provisional application for the '135 patent, Digital River's SSS had attracted its 500th customer. J.A. 6257. Digital River advertised its SSS as a system for generating web pages that allowed website visitors to "purchase and download the digital products of their choice," but still "retain[ed] the *look and feel* of [the host's] site." J.A. 6202 (emphasis added). The SSS was activated when visitors on a host's website clicked a "web site 'buy' button" hyperlink. J.A. 6320. Digital River's advertisements explained that "[w]hen [website visitor] customers want to purchase, they push the 'buy' button and are transferred immediately and transparently to the Digital River Central Commerce Server." J.A. 6202. This component of the SSS then generated and served composite web pages to website visitors that incorporated "look and feel" elements of the host website and product information associated with the host website's "web store" in a manner that "replicate[d] the *look and feel* of the [host's] Web site." J.A. 6320 (emphasis added). These "look and feel" elements and this product information content were stored by Digital River in a data warehouse and retrieved for incorporation into the generated composite web page based on a correlation with the "buy" button hyperlink on the host website. *See id.* In this way, Digital River's SSS would allow "transaction[s to] take[ ] place in the selling environment [the host website had] created, surrounded by the *look and feel* of [the host website's] identity.... There [would be] no sensation [for a website visitor] of being suddenly hustled off to another location." J.A. 6123 (emphasis added).

During trial, a Digital River witness testified at length on how the SSS generated composite web pages with "look and feel" elements from host websites, and operated the SSS for the jury. Digital River also showed the jury several composite web pages generated by the SSS for host websites before the earliest priority date of the '572 patent, including a composite web page that incorporated several elements identified in DDR's patents or by DDR's expert at trial as "look and feel elements": the host website's logo, background color, and prominent circular icons. J.A. 8856–57 (composite web page), 7502 (host website); *see also* J.A. 8858–61 (composite web

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page incorporating host website logo, colors, fonts), 6122 (example web page from host website).

The parties' stipulated construction of "look and feel" requires the generated composite web page to include a set of elements from the host website, each of these elements being a "look and feel element" described in the specification that "convey[s] an overall appearance identifying a website." J.A. 542. Consistent with the specification, the stipulated construction defines these "look and feel elements" that "convey an overall appearance identifying a website" to "include logos, colors, page layout, navigation systems, frames, 'mouse-over' effects, or other elements that are consistent through some or all of a Host's website." *Id.; see also* '572 patent, 14:11–14. Digital River's SSS clearly satisfies this limitation. For example, Digital River showed the jury a host website that included a stylized logo, a particular background color, and prominent circular icons. J.A. 7502. The SSS generated a prior art composite web page that incorporated each of these "look and feel" elements. J.A. 8856–57; *see also* J.A. 6172 (host website) and 6171 (SSS-generated prior art composite web page incorporating logo, navigational menu, and color "look and feel" elements). And as explained above, the SSS was consistently promoted and advertised as creating a composite web page that retained the "look and feel" of the host website. *E.g.,* J.A. 6123, 6202, 6320.

Both the district court and DDR introduced a limitation found neither in the '572 patent's claims nor the parties' stipulated construction. In particular, the district court introduced a requirement that the generated composite web page have an "overall match" in appearance with the host website, beyond what is expressly recited by the claims. *DDR Holdings,* 954 F.Supp.2d at 517; *see also* Appellee's Br. 47. There is nothing, however, in the parties' stipulated construction of "look and feel," the claim language, or the specification that requires the generated composite web page to match the host website or to incorporate a specific number, proportion, or selection of the identified "look and feel" elements on a host website.

In order to satisfy this limitation, it is sufficient that "look and feel" elements identifying the host website are transferred to and displayed on the generated composite webpage. For example, independent claim 13 of the '572 patent merely requires that the generated composite web page have a "look and feel based on the look and feel description in the data store and content based on the commerce object associated wit[h] the link." Independent claim 17 requires only that the generated composite web page have a "look and feel corresponding to the stored look and feel description" of the host website. There is no claim language requiring an "overall match" or a specific number of "look and feel" elements.

Further, the common specification explains that "[t]he look and feel is captured by selecting an example page [from] the host, retrieving the sample page from the host, identifying the look and feel elements from the sample page, and saving the identified look and feel elements." '572 patent, 14:7–10. Nothing in the common specification suggests that satisfaction of the "look and feel" limitation requires more than mechanically identifying "look and feel elements" from a web page on the host website, storing these elements in a data store, and using these stored "look and feel elements" to create the "look and feel" of the generated composite web page.

The jury's determination that the SSS does not anticipate claims 13, 17, and 20 of the '572 patent is not supported by sub-

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stantial evidence. Therefore, the district court erred by denying the defendants' motion for JMOL of invalidity of the '572 patent under 35 U.S.C. § 102(a).[3]

B. Patent-eligible subject matter

NLG also contends that the district court erred by denying its motion for JMOL that the asserted claims of the '572 and '399 patents are invalid under 35 U.S.C. § 101. Since the '572 patent is invalid as anticipated under 35 U.S.C. § 102(a), we focus on NLG's § 101 challenge to claims 1, 3, and 19 of the '399 patent. We conclude, as did the district court, that the asserted claims of the '399 patent clear the § 101 hurdle.

[9, 10] We review the district court's determination of patent eligibility under 35 U.S.C. § 101 *de novo*. *Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1333 (Fed.Cir.2012). In *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, —— U.S. ——, 132 S.Ct. 1289, 1294, 182 L.Ed.2d 321 (2012), the Supreme Court set forth an analytical framework under § 101 to distinguish patents that claim patent-ineligible laws of nature, natural phenomena, and abstract ideas—or add too little to such underlying ineligible subject matter—from those that claim patent-eligible applications of those concepts. First, given the nature of the invention in this case, we determine whether the claims at issue are directed to a patent-ineligible abstract idea. *Alice Corp. v. CLS Bank Int'l*, —— U.S. ——, 134 S.Ct. 2347, 2355, 189 L.Ed.2d 296 (2014). If so, we then consider the elements of each claim—both individually and as an ordered combination—to determine whether the additional elements transform the nature of the claim into a patent-eligible application of that abstract idea. *Id.* This second step is the search for an "inventive concept," or some element or combination of elements sufficient to ensure that the claim in practice amounts to "significantly more" than a patent on an ineligible concept. *Id.*

Distinguishing between claims that recite a patent-eligible invention and claims that add too little to a patent-ineligible abstract concept can be difficult, as the line separating the two is not always clear. At one time, a computer-implemented invention was considered patent-eligible so long as it produced a "useful, concrete and tangible result." *State St. Bank & Trust Co. v. Signature Fin. Grp., Inc.*, 149 F.3d 1368, 1373 (Fed.Cir.1998) (finding a machine that transformed data by a series of mathematical calculations to a final share price to be patent-eligible); *see also In re Alappat*, 33 F.3d 1526, 1544 (Fed.Cir.1994) (en banc). This understanding rested, in large part, on the view that such inventions crossed the eligibility threshold by virtue of being in the technological realm, the historical arena for patented inventions. *See, e.g., In re Bilski*, 545 F.3d 943, 952, 954–56 (Fed.Cir.2008) (en banc) (concluding that a patent-eligible process must either be "tied to a particular machine or apparatus" or transformed into a different state or thing, i.e., the "machine-or-transformation test").

[11] While the Supreme Court in *Bilski v. Kappos* noted that the machine-or-transformation test is a "useful and important clue" for determining patent eligibility, 561 U.S. 593, 130 S.Ct. 3218, 3227, 177 L.Ed.2d 792 (2010), it is clear today that not all machine implementations are creat-

3. Neither Digital River nor NLG ever argued that the '399 patent is invalid as anticipated by or obvious over prior art. We decline to speculate whether Digital River's prior art SSS, either alone or in combination with other prior art, invalidates the '399 patent under 35 U.S.C. §§ 102 or 103.

ed equal. For example, in *Mayo,* the Supreme Court emphasized that satisfying the machine-or-transformation test, by itself, is not sufficient to render a claim patent-eligible, as not all transformations or machine implementations infuse an otherwise ineligible claim with an "inventive concept." *See* 132 S.Ct. at 1301 ("[S]imply implementing a mathematical principle on a physical machine, namely a computer, [i]s not a patentable application of that principle.") (describing *Gottschalk v. Benson,* 409 U.S. 63, 64, 93 S.Ct. 253, 34 L.Ed.2d 273 (1972)). And after *Alice,* there can remain no doubt: recitation of generic computer limitations does not make an otherwise ineligible claim patent-eligible. 134 S.Ct. at 2358. The bare fact that a computer exists in the physical rather than purely conceptual realm "is beside the point." *Id.*

Although the Supreme Court did not "delimit the precise contours of the 'abstract ideas' category" in resolving *Alice,* 134 S.Ct. at 2356–57, over the course of several cases the Court has provided some important principles. We know that mathematical algorithms, including those executed on a generic computer, are abstract ideas. *See Benson,* 409 U.S. at 64, 93 S.Ct. 253. We know that some fundamental economic and conventional business practices are also abstract ideas. *See Bilski,* 130 S.Ct. at 3231 (finding the "fundamental economic practice" of hedging to be patent ineligible); *Alice,* 134 S.Ct. at 2356 (same for intermediated settlement).

In some instances, patent-ineligible abstract ideas are plainly identifiable and divisible from the generic computer limitations recited by the remainder of the claim. For example, the Supreme Court in *Alice* determined that the claims at issue "simply instruct[ed] the practitioner to implement the abstract idea of intermediated settlement on a generic computer." 134 S.Ct. at 2359. In *Ultramercial, Inc. v. Hulu, LLC,* 772 F.3d 709, 715–16 (Fed.Cir. 2014), the claims merely recited the abstract idea of using advertising as a currency as applied to the particular technological environment of the Internet. In *buySAFE, Inc. v. Google, Inc.,* 765 F.3d 1350, 1355 (Fed.Cir.2014), the claims recited no more than using a computer to send and receive information over a network in order to implement the abstract idea of creating a "transaction performance guaranty." In *Accenture Global Servs., GmbH v. Guidewire Software, Inc.,* 728 F.3d 1336, 1344–45 (Fed.Cir.2013), the claims merely recited "generalized software components arranged to implement an abstract concept [of generating insurance-policy-related tasks based on rules to be completed upon the occurrence of an event] on a computer." And in *Bancorp Servs., L.L.C. v. Sun Life Assur. Co. of Canada (U.S.),* 687 F.3d 1266, 1278 (Fed.Cir.2012), the claims recited no more than the use of a computer "employed only for its most basic function, the performance of repetitive calculations," to implement the abstract idea of managing a stable-value protected life insurance policy. Under Supreme Court precedent, the above claims were recited too broadly and generically to be considered sufficiently specific and meaningful applications of their underlying abstract ideas. Although many of the claims recited various computer hardware elements, these claims in substance were directed to nothing more than the performance of an abstract business practice on the Internet or using a conventional computer. Such claims are not patent-eligible.

[12] Against this background, we turn to the '399 patent's asserted claims. We begin our § 101 analysis at *Mayo/Alice* step one: determining whether the computer-implemented claims at issue here are "directed to" a patent-ineligible ab-

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stract idea.[4] Here, we note that the '399 patent's asserted claims do not recite a mathematical algorithm. Nor do they recite a fundamental economic or longstanding commercial practice. Although the claims address a business challenge (retaining website visitors), it is a challenge particular to the Internet.

Indeed, identifying the precise nature of the abstract idea is not as straightforward as in *Alice* or some of our other recent abstract idea cases. NLG's own varying formulations of the underlying abstract idea illustrate this difficulty. NLG characterizes the allegedly abstract idea in numerous ways, including "making two web pages look the same," "syndicated commerce on the computer using the Internet," and "making two e-commerce web pages look alike by using licensed trademarks, logos, color schemes and layouts." *See, e.g.,* Appellant's Br. 18–20. The dissent characterizes DDR's patents as describing the entrepreneurial goal "that an online merchant's sales can be increased if two web pages have the same 'look and feel.' " Dissenting Op. 1263. But as discussed below, under any of these characterizations of the abstract idea, the '399 patent's claims satisfy *Mayo/Alice* step two.

As an initial matter, it is true that the claims here are similar to the claims in the cases discussed above in the sense that the claims involve both a computer and the Internet. But these claims stand apart because they do not merely recite the performance of some business practice known from the pre-Internet world along with the requirement to perform it on the Internet. Instead, the claimed solution is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks.

In particular, the '399 patent's claims address the problem of retaining website visitors that, if adhering to the routine, conventional functioning of Internet hyperlink protocol, would be instantly transported away from a host's website after "clicking" on an advertisement and activating a hyperlink. For example, asserted claim 19 recites a system that, among other things, 1) stores "visually perceptible elements" corresponding to numerous host websites in a database, with each of the host websites displaying at least one link associated with a product or service of a third-party merchant, 2) on activation of this link by a website visitor, automatically identifies the host, and 3) instructs an Internet web server of an "out-source provider" to construct and serve to the visitor a new, hybrid web page that merges content associated with the products of the third-party merchant with the stored "visually perceptible elements" from the identified host website. *See supra* 5.

In more plain language, upon the click of an advertisement for a third-party product displayed on a host's website, the visitor is no longer transported to the third party's website. Instead, the patent claims call for an "outsource provider" having a web server which directs the visitor to an automatically-generated hybrid web page that combines visual "look and feel" elements from the host website and product information from the third-party merchant's website related to the clicked advertisement.[5] In this way, rather than instantly

4. The parties do not dispute that the asserted system and method claims of the '399 patent, for the purposes of § 101, are no different in substance. *See* Appellee Br. 63; Appellant Br. 24. Thus, the form of the asserted claims (system or method) does not affect our analysis of their patent eligibility. *See Alice,* 134 S.Ct. at 2360.

5. On a fundamental level, the creation of new compositions and products based on combining elements from different sources has long

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losing visitors to the third-party's website, the host website can instead send its visitors to a web page on the outsource provider's server that 1) incorporates "look and feel" elements from the host website, and 2) provides visitors with the opportunity to purchase products from the third-party merchant without actually entering that merchant's website.

The dissent suggests that the "store within a store" concept, such as a warehouse store that contains a kiosk for selling a third-party partner's cruise vacation packages, is the pre-Internet analog of the '399 patent's asserted claims. Dissenting Op. 1264. While that concept may have been well-known by the relevant timeframe, that practice did not have to account for the ephemeral nature of an Internet "location" or the near-instantaneous transport between these locations made possible by standard Internet communication protocols, which introduces a problem that does not arise in the "brick and mortar" context. In particular, once a customer enters a physical warehouse store, that customer may encounter a kiosk selling third-party cruise vacation packages. There is, however, no possibility that by walking up to this kiosk, the customer will be suddenly and completely transported outside the warehouse store and relocated to a separate physical venue associated with the third-party—the analog of what ordinarily occurs in "cyberspace" after the simple click of a hyperlink—where that customer could purchase a cruise package without any indication that they were previously browsing the aisles of the warehouse store, and without any need to "return" to the aisles of the store after completing the purchase. It is this challenge of retaining control over the attention of the customer in the context of the Internet that the '399 patent's claims address.

We caution, however, that not all claims purporting to address Internet-centric challenges are eligible for patent. For example, in our recently-decided *Ultramercial* opinion, the patentee argued that its claims were "directed to a specific method of advertising and content distribution that was previously unknown and never employed on the Internet before." 772 F.3d at 1264. But this alone could not render its claims patent-eligible. In particular, we found the claims to merely recite the abstract idea of "offering media content in exchange for viewing an advertisement," along with "routine additional steps such as updating an activity log, requiring a request from the consumer to view the ad, restrictions on public access, and use of the Internet." *Id.* at 1265.

The '399 patent's claims are different enough in substance from those in *Ultramercial* because they do not broadly and generically claim "use of the Internet" to perform an abstract business practice (with insignificant added activity). Unlike the claims in *Ultramercial*, the claims at issue here specify how interactions with the Internet are manipulated to yield a desired result—a result that overrides the routine and conventional sequence of events ordinarily triggered by the click of a hyperlink. Instead of the computer network operating in its normal, expected manner by sending the website visitor to

been a basis for patentable inventions. *See, e.g., Parks v. Booth,* 102 U.S. 96, 102, —— S.Ct. ——, 26 L.Ed. 54 (1880) (''Modern inventions very often consist merely of a new combination of old elements or devices, where nothing is or can be claimed except the new combination.''); *KSR Int'l Co. v. Teleflex Inc.,* 550 U.S. 398, 418–19, 127 S.Ct. 1727, 167 L.Ed.2d 705 (2007) (''[I]nventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known.'').

the third-party website that appears to be connected with the clicked advertisement, the claimed system generates and directs the visitor to the above-described hybrid web page that presents product information from the third-party and visual "look and feel" elements from the host website. When the limitations of the '399 patent's asserted claims are taken together as an ordered combination, the claims recite an invention that is not merely the routine or conventional use of the Internet.

It is also clear that the claims at issue do not attempt to preempt every application of the idea of increasing sales by making two web pages look the same, or of any other variant suggested by NLG. Rather, they recite a specific way to automate the creation of a composite web page by an "outsource provider" that incorporates elements from multiple sources in order to solve a problem faced by websites on the Internet. As a result, the '399 patent's claims include "additional features" that ensure the claims are "more than a drafting effort designed to monopolize the [abstract idea]." *Alice*, 134 S.Ct. at 2357. In short, the claimed solution amounts to an inventive concept for resolving this particular Internet-centric problem, rendering the claims patent-eligible.

In sum, the '399 patent's claims are unlike the claims in *Alice*, *Ultramercial*, *buySAFE*, *Accenture*, and *Bancorp* that were found to be "directed to" little more than an abstract concept. To be sure, the '399 patent's claims do not recite an invention as technologically complex as an improved, particularized method of digital data compression. But nor do they recite a commonplace business method aimed at processing business information, applying a known business process to the particular technological environment of the Internet, or creating or altering contractual relations using generic computer functions and conventional network operations, such as the claims in *Alice*, *Ultramercial*, *buySAFE*, *Accenture*, and *Bancorp*. The claimed system, though used by businesses, is patent-eligible under § 101.[6] The district court did not err in denying NLG's motion for JMOL of invalidity under 35 U.S.C. § 101 as to these claims.

C. Indefiniteness

In its motion for JMOL of invalidity, NLG also sought to invalidate the asserted claims of the '572 and '399 patents on the ground that the terms "look and feel" and "visually perceptible elements" render the claims indefinite because they are impermissibly subjective and fail to notify the public of the bounds of the claimed invention.[7] On appeal, NLG contends that the district court erred by denying its motion. We disagree.

Since the '572 patent's asserted claims are invalid under 35 U.S.C. § 102(a), we need not decide NLG's indefiniteness challenge to the patent based on the term "look and feel." We thus focus our analysis on the term "visually perceptible elements" in the '399 patent's asserted

6. Of course, patent-eligible does not mean patent*able* under, *e.g.*, 35 U.S.C. §§ 102 and 103. As discussed in footnote 3 *supra*, the patent*ability* of the '399 patent's asserted claims is not before us.

7. Though NLG contended that the term "look and feel" is indefinite before the district court, on appeal NLG shifts its focus to "look and feel *description*." "Look and feel" and "look and feel description," while related, are recited as separate terms within the asserted claims. *E.g.*, '572 patent, claim 13 ("... a *look and feel* based on the *look and feel description* in the data store ..."). NLG provides no explanation or justification for its shift in focus. As does DDR in its briefing, we focus our analysis on the term "look and feel."

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claims. The parties stipulated to a construction of the term as " 'look and feel' elements that can be seen." J.A. 542. NLG argues that the term "is effectively the same as 'look and feel description,' " and therefore lacks definiteness for the same reasons. Appellant's Br. 30 n.12.

[13, 14] Indefiniteness is a question of law we review *de novo*. *Wellman, Inc. v. Eastman Chem. Co.*, 642 F.3d 1355, 1365–66 (Fed.Cir.2011). The definiteness requirement is set forth in 35 U.S.C. § 112 ¶ 2, which states that "[t]he specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention." The definiteness requirement focuses on whether "a patent's claims, viewed in light of the specification and prosecution history, inform those skilled in the art about the scope of the invention with reasonable certainty." *Nautilus, Inc. v. Biosig Instruments, Inc.*, —— U.S. ——, 134 S.Ct. 2120, 2129, 189 L.Ed.2d 37 (2014). The inquiry "trains on the understanding of a skilled artisan at the time of the patent application." *Id.* at 2130.

[15] When a claim term "depend[s] solely on the unrestrained, subjective opinion of a particular individual purportedly practicing the invention," without sufficient guidance in the specification to provide objective direction to one of skill in the art, the term is indefinite. *Datamize, LLC v. Plumtree Software, Inc.*, 417 F.3d 1342, 1350 (Fed.Cir.2005) (finding "aesthetically pleasing" to be indefinite because the specification lacked any objective definition of the term). For some facially subjective terms, the definiteness requirement is not satisfied by merely offering examples that satisfy the term within the specification. *See Interval Licensing LLC v. AOL, Inc.*, 766 F.3d 1364, 1371–73 (Fed.Cir.2014) (finding a single example of the term "unobtrusive manner" in the specification did not outline the claims to a skilled artisan with reasonable certainty). For other terms like, for example, terms of degree, specific and unequivocal examples may be sufficient to provide a skilled artisan with clear notice of what is claimed. *See Enzo Biochem, Inc. v. Applera Corp.*, 599 F.3d 1325, 1334–35 (Fed.Cir.2010) (finding the phrase "not interfering substantially" to be definite where intrinsic evidence provided multiple examples that would allow a skilled artisan to determine whether a particular chemical bond linkage group would "interfer[e] substantially" with hybridization).

[16] Here, though NLG attempts to characterize "look and feel" as purely subjective, the evidence demonstrates that "look and feel" had an established, sufficiently objective meaning in the art, and that the '399 patent used the term consistent with that meaning. The specification explains that "the look and feel is captured by selecting an example page [from] the host, retrieving the sample page from the host, identifying the look and feel elements from the sample page and saving the identified look and feel elements." '399 patent, 13:5–9. "Look and feel elements" are described as "includ[ing] logos, colors, page layout, navigation systems, frames, 'mouse-over' effects, or other elements that are consistent through some or all of a Host's website." *Id.* at 13:9–12. DDR's expert on infringement testified that a skilled artisan would interpret these "other elements" as elements such as headers, footers, fonts, and images. J.A. 3584.

These examples are consistent with the established meaning of the term "look and feel" in the art, as demonstrated by Digital River's own evidence at trial. For example, as discussed in Section II. A., Digital River advertised its prior art SSS as generating composite web pages that dis-

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played third-party merchandise but also replicated the " 'look and feel' of the [host website's] identity." J.A. 6123. Digital River also explained that the composite web pages generated by its SSS "retain[ed] the look and feel of the [host's web]site." J.A. 6202. At trial, Digital River conceded that it understood the meaning of "look and feel." J.A. 4146–47 ("Q. And Digital River understood what it meant when it said: we'll match your look and feel, right? A. Yes, sir."). Digital River also admitted that its *customers* understood the meaning of "look and feel." J.A. 4199 ("Q. . . . [S]omebody who is reading Digital River's [advertising] document should understand what Digital River means when it says matching look and feel, right? . . . A. Yes, sir.").

In sum, "look and feel" is not a facially subjective term like "unobtrusive manner" in *Interval* or "aesthetically pleasing" in *Datamize*. Rather, as demonstrated by Digital River's own advertisements for its prior art SSS and its admissions at trial, the term had an established meaning in the art by the relevant timeframe. The examples of "look and feel" elements disclosed in the specification are consistent with the term's established meaning. In short, the term "visually perceptible elements," or " 'look and feel' elements that can be seen," viewed in light of the specification and prosecution history, informed those skilled in the art about the scope of the '399 patent's claims with reasonable certainty. The district court did not err by denying NLG's motion for JMOL of invalidity of the '399 patent under 35 U.S.C. § 112 ¶ 2.

D. Infringement

NLG also contends that the district court erred by denying its motion for JMOL of noninfringement as to both the '572 and '399 patents. Since the '572 patent is invalid under 35 U.S.C. § 102(a), we address only NLG's noninfringement appeal of the '399 patent. We find, as did the district court, that the jury was presented with substantial evidence on which to base its finding that NLG infringes the asserted claims of the '399 patent.

NLG argues that the jury's finding that NLG's accused websites satisfy the "visually perceptible elements" limitation of the asserted claims is unsupported. NLG further argues that DDR failed to introduce evidence that NLG's accused system automatically identifies or recognizes the source web page as required by claims 1 and 19 of the '399 patent. NLG also argues that DDR only showed the jury screenshot images of the accused web-sites running NLG's e-commerce system on a single day, and thus did not provide evidence of NLG's alleged infringement throughout the entire damages period.

[17] The record tells a different tale. For the "visually perceptible elements" limitation, the jury viewed screenshot images from nine NLG-partner host websites and their corresponding accused NLG-operated composite web pages. DDR's expert on infringement also presented the jury with lists of the "look and feel elements" from each host website allegedly incorporated in a corresponding NLG-generated composite web page and opined that the accused composite web pages satisfied the limitation. The jury was free to use this proffered evidence and testimony to form its own conclusions as to whether NLG's accused composite web pages satisfied the "visually perceptible elements" limitation of the asserted claims.

As for the other contested limitations of the '399 patent's asserted claims, DDR's expert on infringement testified that on activation of a link on an NLG-partner host website corresponding to an NLG-generated composite web page, a keyword

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identifier is sent to NLG's e-commerce web server (*e.g.*, "OBWEB" for Orbitz's host website), and a processor therein determines the location and identity of the host website (*e.g.*, Orbitz). The jury was free to credit this testimony as evidence that NLG's accused e-commerce system "automatically ... recogniz[es]" or "automatically identif[ies]" the source page "on which the link has been activated."

NLG's argument that DDR provided the jury with screenshot images of NLG's accused composite web pages—and thus evidence of infringement—for only one day appears to be more relevant to damages than to infringement. Regardless, NLG's contention is without merit. DDR's expert testified that he had examined NLG's accused system throughout the entire period of alleged infringement, including any changes in its software source code, deposition testimony on its operation, and, via the Internet Archive, prior versions of accused composite web pages. Based on his review, DDR's expert testified that nothing about NLG's accused system "had changed in any substantial way" during this period. J.A. 3751–52. Substantial evidence supports the jury's finding that NLG's accused system infringes the '399 patent, and thus the district court did not err in denying NLG's motion for JMOL of noninfringement.

E. Damages

DDR sought $6.04 million in damages for NLG's infringement of the '572 and '399 patents; NLG countered with $375,000. The parties agreed on a verdict form that instructed the jury to award a single sum to compensate DDR for NLG's infringement of the asserted claims found to be infringed and not invalid. J.A. 3080. The jury awarded DDR $750,000 in damages for NLG's infringement, without specifying how this award was apportioned between the '572 and the '399 patents.

Because we find the '572 patent invalid as anticipated, we vacate the damages award. This could warrant a new trial on damages. *See Verizon Servs. Corp. v. Vonage Holdings Corp.*, 503 F.3d 1295, 1310 (Fed.Cir.2007). NLG did not, however, move for a new trial under FRCP 59 and may not have preserved its recourse to this option. *DDR Holdings*, 954 F.Supp.2d at 522 ("Interestingly however, NLG does not move for a new trial pursuant to Rule 59."). We remand to the district court to determine the effect—if any—of our invalidation of the '572 patent on the jury's damages award.[8]

F. Prejudgment Interest

The district court also awarded DDR prejudgment interest. NLG contends that DDR should not be entitled to any prejudgment interest because it is a non-practicing entity and at a minimum, DDR should not be entitled to any prejudgment interest during a four-year stay in litigation since the stay was the result of DDR's request for *ex parte* reexamination of the '135 and '572 patents.

[18, 19] We review the district court's award of prejudgment interest for an abuse of discretion. *See Telcordia Techs., Inc. v. Cisco Sys., Inc.*, 612 F.3d 1365, 1377 (Fed.Cir.2010); *see also Gen. Motors Corp. v. Devex Corp.*, 461 U.S. 648, 657, 103 S.Ct. 2058, 76 L.Ed.2d 211 (1983) ("[A] decision to award prejudgment interest will only be

8. We note that NLG's contention that the jury's damages award was "grossly excessive" because its accused websites infringed for only one day is based on a flawed premise and is without merit. As the district court explained, NLG cannot attempt to "reverse engineer the jury's math ... and use its substituted, and purely speculative, analysis to call the award excessive." *DDR Holdings*, 954 F.Supp.2d at 530.

set aside if it constitutes an abuse of discretion."). Under 35 U.S.C. § 284, after a finding of infringement, the court "*shall award* . . . damages . . . together with *interest* and costs." (emphases added). Prejudgment interest should ordinarily be awarded absent some justification for withholding such an award. *Gen. Motors,* 461 U.S. at 657, 103 S.Ct. 2058; *see also Energy Transp. Grp., Inc. v. William Demant Holding A/S,* 697 F.3d 1342, 1358 (Fed.Cir. 2012) ("The award of pre-judgment interest is the rule, not the exception.") (quotation and citation omitted).

NLG cites no case law suggesting that prevailing non-practicing entities are *not* entitled to prejudgment interest. We decline to create such a statutory exception. *See Energy Transp.,* 697 F.3d at 1358 ("The district court did not abuse its discretion in this case by following the standard rule of awarding pre-judgment interest."). However, since the '572 patent is invalid, the district court must recalculate its award of prejudgment interest so that it is tied solely to NLG's infringement of the '399 patent, which issued in 2010, more than four years after issuance of the '572 patent. *Nickson Indus., Inc. v. Rol Mfg. Co.,* 847 F.2d 795, 800 (Fed.Cir.1988) ("Generally, prejudgment interest should be awarded from the date of infringement to the date of judgment."). Since the '399 patent did not issue until after the stay was lifted in 2010, we need not determine whether DDR is entitled to prejudgment interest during the pendency of the contested stay.

We have considered the parties' remaining arguments and find them unpersuasive.

III. Conclusion

In large part, we affirm the district court. The asserted claims of the '572 patent, however, are anticipated by Digital River's prior art Secure Sales System under 35 U.S.C. § 102(a), and no substantial evidence supports the jury's contrary finding. As such, the district court erred in denying defendants' motion for JMOL of invalidity as to the '572 patent. We vacate the award of damages and prejudgment interest to DDR based on NLG's infringement of the '572 and '399 patents and remand to the district court in order to determine the damages and prejudgment interest attributable solely to NLG's infringement of the '399 patent.

AFFIRMED IN PART, REVERSED IN PART, AND REMANDED

Costs

No costs.

MAYER, Circuit Judge, dissenting.

I respectfully dissent. The claims asserted by DDR Holdings, LLC ("DDR") fall outside 35 U.S.C. § 101 because they simply describe an abstract concept—that an online merchant's sales can be increased if two web pages have the same "look and feel"—and apply that concept using a generic computer.

I.

The common specification of DDR's patents notes that an online merchant will often lose customers when those customers click on an advertisement from a third-party vendor that has been displayed on the original merchant's web page. *See* U.S. Patent No. 6,993,572 (the "'572 patent") col.2 ll.30–33. The specification explains, however, that the original merchant could potentially avoid "the loss of hard-won visitor traffic," *id.* col.2 ll.64–65, if he were able to dupe customers into believing that they were still on the merchant's web page even when they were actually viewing goods from a third-party vendor, *id.* col.2

ll.26–65. Notably, though, DDR's patents are very vague as to how this duping is to occur, indicating only that the web page of the original merchant and that of the third-party vendor should be made to look alike using "visually perceptible elements." *See* U.S. Patent No. 7,818,399 (the "'399 patent") col.28 ll.31–32 (requiring the use of a "plurality of visually perceptible elements visually corresponding to the [original merchant's web] page"). DDR's patents fail to meet the demands of section 101 because they describe a goal—confusing consumers by making two web pages look alike—but disclose no new technology, or "inventive concept," *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, —— U.S. ——, 132 S.Ct. 1289, 1294, 182 L.Ed.2d 321 (2012), for achieving that goal. *See O'Reilly v. Morse*, 56 U.S. (15 How.) 62, 120, 14 L.Ed. 601 (1854) (rejecting a claim which covered "an effect produced by the use of electro-magnetism distinct from the process or machinery necessary to produce it"); *In re Brooks*, 24 CCPA 1203, 90 F.2d 106, 107–08 (1937) ("It is for the discovery or invention of some practicable method or means of producing a beneficial result or effect, that a patent is granted, and *not for the result or effect itself.*" (emphasis added) (citations and internal quotation marks omitted)).

DDR's patents are long on obfuscation but short on substance. Indeed, much of what they disclose is so rudimentary that it borders on the comical. For example, the patents explain that two web pages are likely to look alike if they are the same color, have the same page layout, and display the same logos. *See* '572 patent col.14 ll.5–18. The recited computer limitations, moreover, are merely generic. The claims describe use of a "data store," a "web page having a link," and a "computer processor," *id.* col.29 ll.1–13, all conventional elements long-used in e-commerce. Because DDR's claims, like those at issue in *Alice Corporation v. CLS Bank International*, "simply instruct the practitioner to implement [an] abstract idea . . . on a generic computer," they do not meet section 101. —— U.S. ——, 134 S.Ct. 2347, 2359, 189 L.Ed.2d 296 (2014); *see id.* at 2360 (rejecting claims requiring a "data processing system' " with a "communications controller" and a "data storage unit" as "purely functional and generic" (citations and internal quotation marks omitted)); *Accenture Global Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1344 (Fed.Cir.2013) (rejecting claims requiring "a combination of computer components including an insurance transaction database, a task library database, a client component, and a server component, which include[d] an event processor, a task engine, and a task assistant").

II.

The court concludes that the asserted claims of DDR's '399 patent fall within section 101 because "they do not merely recite the performance of some business practice known from the pre-Internet world along with the requirement to perform it on the Internet." *Ante* at 1257. This is incorrect. DDR's claims do, in fact, simply take a well-known and widely-applied business practice and apply it using a generic computer and the Internet. The idea of having a "store within a store" was in widespread use well before the dawn of e-commerce. For example, National Leisure Group, Inc. ("NLG"), one of the defendants here, previously "sold vacations at . . . BJ's Wholesale Clubs through point of purchase displays in the 45 BJ's Clubs along the Eastern Seaboard." Br. of Defendants–Appellants National Leisure Group, Inc. and World Travel Holdings, Inc. at 4. DDR's patents are directed to the same concept. Just as visitors to BJ's Wholesale Clubs could purchase trav-

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el products from NLG without leaving the BJ's warehouse, the claimed system permits a person to purchase goods from a third-party vendor, but still have the visual "impression that she is viewing pages served by the [original host merchant]." '399 patent col.3 ll.23–24; *see ante* at 1264 (explaining that DDR's claimed system "permits a website visitor, in a sense, to be in two places at the same time"). Indeed, any doubt as to whether the claimed system is merely an Internet iteration of an established business practice is laid to rest by the fact that one of the named inventors acknowledged that the innovative aspect of his claimed invention was "[t]aking something that worked in the real world and doing it on the Internet." J.A. 03208.

Alice articulated a technological arts test for patent eligibility. 134 S.Ct. at 2359 (explaining that the claimed method fell outside section 101 because it did not "improve the functioning of the computer itself" or "effect an improvement in any other technology or technical field"). Here, the court correctly recognizes *Alice's* technological arts standard, but applies it in a deficient manner. According to the court, DDR's claims fall within section 101 because the "solution" they offer "is *necessarily rooted* in *computer technology* in order to overcome a problem specifically arising in the realm of computer networks." *Ante* at 1257 (emphasis added). The solution offered by DDR's claims, however, is not rooted in any new computer technology. Its patents address the problem of preventing online merchants from losing "hard-won visitor traffic," '572 patent col.2 ll.64–65, and the solution they offer is an entrepreneurial, rather than a technological, one. DDR has admitted that it did not invent any of the generic computer elements disclosed in its claims. J.A. 3311–16. There is no dispute, moreover, that at the time of the claimed invention the use of hyperlinks to divert consumers to particular web pages was a well-understood and widely-used technique. *See* '399 patent col.1 ll.29–52. While DDR's patents describe the potential advantages of making two web pages look alike, they do not disclose any non-conventional technology for capturing the "look and feel" of a host website or for giving two web pages a similar appearance. *See Alice*, 134 S.Ct. at 2360 ("[W]hat petitioner characterizes as specific hardware . . . is purely functional and generic."); *Accenture*, 728 F.3d at 1345 (rejecting claims that contained no "detailed software implementation guidelines"). DDR's patents fall outside section 101 because they simply "tak[e] existing information"—the visual appearance of a host merchant's website—and use conventional technology to "organiz[e] this information into a new form." *Digitech Image Techs., LLC v. Elecs. for Imaging, Inc.*, 758 F.3d 1344, 1351 (Fed.Cir.2014); *see Mayo*, 132 S.Ct. at 1298 (emphasizing that reciting "well-understood, routine, [or] conventional activity" does not impart patent eligibility).

In concluding that DDR's claims meet the demands of section 101, the court focuses on the fact that "they recite a *specific* way to automate the creation of a composite web page. . . ." *Ante* at 1259 (emphasis added). The Supreme Court, however, has emphatically rejected the idea that claims become patent eligible simply because they disclose a specific solution to a particular problem. *See Bilski v. Kappos*, 561 U.S. 593, 599–601, 130 S.Ct. 3218, 177 L.Ed.2d 792 (2010) (concluding that claims fell outside section 101 notwithstanding the fact that they disclosed a very specific method of hedging against price increases); *Parker v. Flook*, 437 U.S. 584, 593, 98 S.Ct. 2522, 57 L.Ed.2d 451 (1978) (rejecting the argument "that if a process application imple-

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ments a principle in some specific fashion, it automatically falls within the patentable subject matter of § 101"). Indeed, although the claims at issue in *Alice* described a very specific method for conducting intermediated settlement, the Court nonetheless unanimously concluded that they fell outside section 101. 134 S.Ct. at 2358–60.

Nor is the fact that the claims address an "Internetcentric problem," *ante* at 1259, sufficient to render them patent eligible. The Supreme Court has repeatedly made clear that "limiting the use of an abstract idea to a particular technological environment" is insufficient to confer patent eligibility. *Alice*, 134 S.Ct. at 2360 (citations and internal quotation marks omitted); *see also Mayo*, 132 S.Ct. at 1294; *Bilski*, 561 U.S. at 610, 130 S.Ct. 3218. Accordingly, the fact that DDR's system operates "in the context of the Internet," *ante* at 1258, does not bring it within patentable subject matter.

The potential scope of DDR's patents is staggering, arguably covering vast swaths of Internet commerce. DDR has already brought infringement actions against ten defendants, including Digital River, Inc., Expedia, Inc., Travelocity.com, L.P., and Orbitz Worldwide, LLC. *See* J.A. 255–63; *ante* at 1250. DDR's claims are patent ineligible because their broad and sweeping reach is vastly disproportionate to their minimal technological disclosure. *See Mayo*, 132 S.Ct. at 1303 (In assessing patent eligibility, "the underlying functional concern . . . is a *relative* one: how much future innovation is foreclosed relative to the contribution of the inventor.").

Alice made clear that claims untethered to any advance in science or technology do not pass muster under section 101. 134 S.Ct. at 2359. Viewed as a whole, DDR's claims contain no more than an abstract idea for increasing sales implemented via "some unspecified, generic computer," *id.* at 2360. The inventive concept, if any, embedded in DDR's claims is an idea for "retaining control over the attention of the customer," *ante* at 1258. Because this purported inventive concept is an entrepreneurial rather than a technological one, DDR's claims are not patentable.

MEMORYLINK CORP., a Wisconsin Corporation, Plaintiff–Appellant,

v.

MOTOROLA SOLUTIONS, INC. and MOTOROLA MOBILITY, Inc., Defendants–Appellees.

No. 2014–1186.

United States Court of Appeals, Federal Circuit.

Dec. 5, 2014.

Background: Transferor commenced action against transferee, alleging contract and patent infringement claims over sale, assignment, and transfer of patent rights relating to wireless video technology. The United States District Court for the Northern District of Illinois, John J. Tharp, Jr., J., 2013 WL 4401676, granted summary judgment for transferee. Transferor appealed.

Holdings: The Court of Appeals, Lourie, Circuit Judge, held that:

(1) explicit acknowledgment of consideration in assignment was sufficient to show that consideration existed to support sale, assignment, and transfer of patent rights;

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

WIRELESS DISCOVERY LLC,	)	
	)	
Plaintiff,	)	
	)	
v.	)	C.A. No. 22-480 (VAC) (SRF)
	)	
EHARMONY, INC.,	)	
	)	
Defendant.	)	

DEFENDANT EHARMONY, INC.'S
OPENING BRIEF IN SUPPORT OF MOTION TO DISMISS

Dated: September 7, 2022

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I. INTRODUCTION

Wireless Discovery's amended complaint (D.I. 21) should be dismissed with prejudice because the claims of the Asserted Patents[1] are invalid under 35 U.S.C. § 101. The claims are directed to the abstract idea of social networking, such as matching people by their location. Claims of this type are consistently invalidated by this Court. *See, e.g.*, *Walker Digit., LLC v. Google, Inc.*, 66 F. Supp. 3d 501, 508 (D. Del. 2014) (finding the "controlled exchange of information about people as historically practiced by matchmakers and headhunters" an abstract idea (citing *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208 (2014))).

The claims are invalid because, among other reasons, they fail to describe *how* to implement the abstract idea of social networking, such as matching people by their location, in a non-abstract way. *See Two-Way Media Ltd. v. Comcast Cable Commc'ns, LLC*, 874 F.3d 1329, 1337–38 (Fed. Cir. 2017). Further, the generic processing steps lack any technical advance to well-known information-sharing systems; their components—a "standard cell phone" equipped with "available technology and standard protocols available today" such as "cellular technology," "Bluetooth technology," or "Wi-Fi"— are mere tools to implement that abstract idea. (D.I. 21-5 at 2:50, 4:17–18, 11:45–46).

Discovery and claim construction are unnecessary. The Court should hold the claims of the Asserted Patents invalid and dismiss the Amended Complaint with prejudice.

II. NATURE AND STAGE OF PROCEEDINGS

Wireless Discovery sued eHarmony on April 13, 2022 (D.I. 1) and amended its complaint on July 18, 2022 (D.I. 21). Wireless Discovery alleges infringement of "one or more" claims from each Asserted Patent. (*Id.* ¶¶ 11, 17, 23, 29.) The amended complaint incorporates an "exemplary

[1] U.S. Patent Nos. 9,264,875 (the "'875 Patent"), 9,357,352 (the "'352 Patent"), 10,321,267 (the "'267 Patent"), and 10,334,397 (the "'397 Patent") (collectively, the "Asserted Patents").

table" purporting to illustrate Wireless Discovery's infringement contentions for one claim of each Asserted Patent only. (*Id.* ¶¶ 12, 18, 24, 30; D.I. 21-2.)

III. SUMMARY OF ARGUMENT

Wireless Discovery's complaint should be dismissed with prejudice because:

1. Independent claim 1 of the '875 Patent has already been held invalid for indefiniteness. *Wireless Discovery LLC v. Bumble Trading Inc.*, No. 6:20-cv-00762, D.I. 43 at 5 (W.D. Tex. Nov. 18, 2021) (attached as Exhibit A). Claims 2 through 9 are also indefinite because they "incorporate the elements of independent claim 1." *Ibormeith IP, LLC v. Mercedes-Benz USA, LLC*, 732 F.3d 1376, 1378 (Fed. Cir. 2013). eHarmony "may reap the benefit of the invalidity decision under the principles of collateral estoppel." *Pharmacia & Upjohn Co. v. Mylan Pharm., Inc.*, 170 F.3d 1373, 1379 (Fed. Cir. 1999) (quotation omitted); *see also Uniloc 2017 LLC v. Zenpayroll, Inc.*, C.A. No. 19-1075-CFC-SRF, 2021 WL 271800, at *5 (D. Del. Jan. 27, 2021).[2]

2. All claims of the Asserted Patents "are directed to a patent-ineligible concept." *Alice*, 573 U.S. at 218. Specifically, the claims are directed to the abstract idea of social networking, such as matching people by their location. *See NetSoc, LLC v. Match Grp., LLC*, 838 F. App'x 544, 548 (Fed. Cir. 2020) ("automating the conventional establishment of social networks to allow humans to exchange information and form relationships" held abstract); *Jedi Techs. Inc. v. Spark Networks Inc.*, C.A. No. 16-1055-GMS, 2017 WL 3315279, at *7 (D. Del. Aug. 3, 2017) (matching people based on location held abstract); *Perry St. Software, Inc. v. Jedi Techs., Inc.*, 548 F. Supp. 3d 418, 433 (S.D.N.Y. 2021) ("[m]atching based on geographic location" held abstract).

[2] Wireless Discovery knew when it filed its complaint that claims 1 through 9 were invalid. It never should have suggested the possibility that these claims could be asserted. (D.I. 1 ¶ 11.) *See Energy Heating, LLC v. Heat On-The-Fly, LLC*, 15 F.4th 1378, 1383 (Fed. Cir. 2021) (finding a case exceptional under 35 U.S.C. § 285 when patentee "knew that its patent was invalid") (quotation omitted). eHarmony notified Wireless Discovery of this issue on July 26, 2022. (D.I. 23, n.1.)

3. The claims of the Asserted Patents further lack "an inventive concept sufficient to transform the claimed idea into a patent-eligible application." *Alice*, 573 U.S. at 221 (internal quotation marks omitted) (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 79–80 (2012)). The claims recite a "generic computer system" that "could be replaced with a human matchmaker who compares two individuals based on submitted or publicly available information, and then sends both chatters a message which prompts their meeting." *Jedi Techs.*, 2017 WL 3315279, at *8; *see also Perry St.*, 548 F. Supp. 3d at 436 (holding "general steps for how individuals are matched or introduced" in "internet chatrooms" lack inventive concept).

IV. STATEMENT OF FACTS

A. The Asserted Patents Describe Social Networking, Such as Matching People by Their Location, Using Standard "Cellular Technology," "Bluetooth Technology," and "Wi-Fi"

The Asserted Patents purport to address a "need . . . to exchange customized information such as pictures, social network profiles, emails and phone numbers using [] mobile devices." (*E.g.*, D.I. 21-5 at 1:27–30.) They describe a social network enabling "mobile device users" to "offer to other, nearby users, their pictures or other information as part of a discovery process," to "save contacts received from other users," and to "keep contacts stored on a mobile device up to date." (*Id.* at 2:24–28.) This information may be exchanged through "social cards," which "include social profiles, emails, phone numbers and/or a picture." (*Id.* at 3:39–41.) Users communicate with a server hosting the social network "according to a packet-based telecommunications protocol such as GPRS, 3G, 4G, LTE or any alternative data technology." (D.I. 21-3 at 7:21–23.)

On the social network, users can be matched by an "attribute," such as location, through a "standard Bluetooth discovery process" that runs on "existing standard Bluetooth technology." (D.I. 21-5 at 2:43–44, 3:17–18; D.I. 21-3 at 6:47–50.) For example, "mobile device users" may "discover other members of the same . . . social network" who are located "within a vicinity" of

the users. (D.I. 21-5 at 4:4–6.) Additionally, the users' vicinity may be determined by a "location . . . reported to [a computer] server," by a location recorded in a database, or by user-defined "search criteria." (*Id.* at 5:4–13.) When a user logs in, the user's device may provide the server with an "update on location," and the server may transmit back to the device "the pictures and names, or other information, for each of the devices in the vicinity." (D.I. 21-3 at 9:62–10:8.)

On discovering another member of the social network, a user may "select[]" and "send an invitation" to that member. (D.I. 21-5 at 5:18.) The "form" of the invitation may be "a social card, VCard, or other manner of engaging another person in a social atmosphere, or even a business setting such as a meeting, trade show, conference, etc." (*Id.* at 5:19–22.) The server may simply "inform[] User #2 of User #1's interest in connecting" and provide a "picture and personal attributes for User #2 to accept or decline the invitation to connect/chat." (D.I. 21-3 at 10:49–53.)

If the discovered member accepts the invitation, then the user and the discovered member may "exchange or send personalized, intimate contact information over the internet." (D.I. 21-5 at 4:10–11.) Contact information is stored on a "device accessible through a cellular phone network." (*Id.* at 2:30–31.) When the user and the discovered member agree to exchange this contact information, they "bypass[] . . . security/privacy barriers and/or hardware compatibilit[y]" issues between "mobile devices of different brands." (*Id.* at 2:10–11, 4:12–15.) This bypass may be performed using "available technology and standard protocols available today," such as "cellular technology," "Bluetooth technology," and "Wi-Fi." (*Id.* at 4:17–20, 11:44–50.) "As an example, one member can be connected to the service of the social network and the computing device through internet service over cellular signal while the other person could be connected to the same service through WiFi® signal that provides internet access." (D.I. 21-3 at 15:10–15.)

Users may download an app from an "application provider" or request a download link from a "website." (*Id*. at 7:2–7.) Communications between the server and the app are "conducted via a common internet protocol suite." (*Id*. at 11:4–7.) Thus, if "a user switches mobile devices, all the user has to do is to install the [app] on the new device and login with his/her credentials," then the server "synchronizes all stored information to the new device." (*Id*. at 11:37–43.)

All told, the claimed social network can be "implemented on almost any type of mobile communication device," such as "a standard cell phone." (D.I. 21-5 at 2:49–50.)

B. Claims 1–9 of the '875 Patent Have Already Been Held Invalid

During a prior Wireless Discovery lawsuit, a district court held independent claim 1 of the '875 Patent invalid for indefiniteness. *Wireless Discovery LLC*, D.I. 43 at 5. Dependent claims 2 through 9 are also invalid for indefiniteness because they "incorporate the elements of independent claim 1." *Ibormeith*, 732 F.3d at 1378. eHarmony "may reap the benefit of the invalidity decision under the principles of collateral estoppel." *Pharmacia*, 170 F.3d at 1379 (quotation omitted).[3]

V. ARGUMENT

A. The Complaint Should be Dismissed with Prejudice Because the Claims of the Asserted Patents Are Directed to Patent-Ineligible Subject Matter

The Complaint should be dismissed with prejudice under Rule 12(b)(6) because all claims of the Asserted Patents are directed to a patent-ineligible "abstract idea[]." *Alice*, 573 U.S. at 216 (quotation omitted). Patent ineligibility can be determined at the Rule 12(b)(6) stage when no factual allegations prevent resolving the issue as a matter of law. *Universal Secure Registry LLC v. Apple Inc.*, 10 F.4th 1342, 1346 (Fed. Cir. 2021). No such allegations exist here.

[3] Claims 1–9 of the '875 Patent would be invalid under Section 101 for the same reasons as claims 10–20. Wireless Discovery is collaterally estopped from asserting those claims. *Pharmacia*, 170 F.3d at 1379. eHarmony will submit supplemental briefing as to the subject-matter-eligibility issues in claims 1–9 should the Court wish to analyze the issue.

network (claim 3), receiving profile information from the separate social network (claim 4), providing an app on user devices to allow users to interact with the social network server (claim 5), storing contact information and pictures on the app (claim 6), presenting pictures and names of nearby users available to connect on the app (claim 7), and presenting connection invitations that may be accepted or rejected on the app (claim 8). Independent claim 9 is materially identical to claim 1. Dependent claims 10–15 correspond to features and functionality recited in claims 2–8.

Like the dependent claims of the '875 Patent, '352 Patent, and '267 Patent, dependent claims 2 through 8 merely "recite well-known, routine, and conventional functions of . . . computers." *Content Extraction*, 776 F.3d at 1349; *Mgmt. Sci. Assocs.*, 510 F. Supp. 3d at 245. Even if the dependent claims narrowed the abstract idea, "a claim is not patent eligible merely because it applies the abstract idea in a narrow way." *Abel*, 838 F. App'x at 561 (quoting *BSG Tech.*, 899 F.3d at 1287). The claims of the '397 Patent also claim functionality, and "nothing in the claim points to a specific improvement in computers in their communications role." *Id*. Claim 1, a system claim, is also representative of claim 9, a method claim. *Content Extraction*, 776 F.3d at 1348. And claims 10–15, like claims 2–8, recite features and functions that are well-known, routine, and conventional functions of computers.

C. The Asserted Patents Fail *Alice* Step One Because They Are Directed to the Abstract Idea of Social Networking, Such as Matching People by Their Location

The Asserted Patents fail *Alice* step one because the claims are directed to the abstract idea of social networking, such as matching people by their location. *NetSoc*, 838 F. App'x at 548 ("automating the conventional establishment of social networks to allow humans to exchange information and form relationships" held abstract). It is well established that "the claimed invention of establishing a social network is an abstract idea 'pertaining to methods of organizing human activity.'" *Id*. (quoting *In re TLI Commc'ns LLC Patent Litig.*, 823 F.3d 607, 613 (Fed. Cir.

2016)). Claims directed to matching people by location, including the claims here, are similarly abstract. *See Jedi Techs.*, 2017 WL 3315279, at *7; *see also Perry St.*, 548 F. Supp. 3d at 433 ("[m]atching based on geographic location" held abstract).

1. The claims of the '875 Patent are directed to an abstract idea.

Claim 10 of the '875 Patent is directed to the abstract idea of social networking, such as matching people by their location. It recites a method that can be distilled down to seven generic steps: [10.1] providing "user profile information" about two mobile device users, [10.2] receiving the locations of the devices, [10.3] receiving "identifiers" of all devices on a "social network," [10.4] sending an "invitation" from one user to another, [10.5] connecting users for "personal communication," [10.6] transmitting information from one user's "social network file" to the other's device, and [10.7] disclosing "social network attributes" of nearby users. This is mere automation of conventional social networking, such as matching people by their location, that can be and has been performed by a human with pen and paper, i.e., a human matchmaker. *See CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1373 (Fed. Cir. 2011) (holding claims ineligible because they could "be performed in the human mind, or by a human using a pen and paper"); *Walker Digital*, 66 F. Supp. 3d at 508 (finding "controlled exchange of information about people as historically practiced by matchmakers and headhunters" abstract); *accord Reputation.com, Inc. v. Birdeye, Inc.*, C.A. No. 21-129-LPS-CJB, 2022 WL 609161, at *14 (D. Del. Jan. 31, 2022).

References to sending, receiving, and processing data do not save the claims. In *NetSoc*, for example, the court held that "the claimed invention of establishing a social network is an abstract idea" even though the claims included data-processing steps:

> The claim limitations of "maintaining" a list of participants, "presenting" a user with selectable categories, "receiving" the user's category selection, "receiving" an inquiry from the user, "selecting" a participant to receive the user's inquiry,

> "sending" the inquiry to the participant, "receiving" a response to the inquiry from the participant, "publishing" the response, and "tracking" feedback of the participants . . . are directed to automating a longstanding, well-known method of organizing human activity, similar to concepts previously found to be abstract.

838 F. App'x at 550; *see also SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1167 (Fed. Cir. 2018) ("[C]laims focused on collecting information, analyzing it, and displaying certain results of the collection and analysis are directed to an abstract idea."). Matching social network users by location is no different. "Updating information based on a person's location, and filtering and summarizing that information . . . based on a person's preferences or needs" are abstract ideas that have long been "performed by a variety of individuals or entities, such as . . . online services." *Brit. Telecomm. v. IAC/InterActiveCorp*, 381 F. Supp. 3d 293, 312 (D. Del. 2019). The social networking idea claimed in the '875 Patent, including its data-processing steps, is equally abstract.

2. The claims of the '352 Patent are directed to an abstract idea.

Claim 1 of the '352 Patent is directed to the abstract idea of social networking, such as matching people by their location. It recites a system that can be distilled down to eight generic elements: [1.1] a server hosting a social network that shares members' name and pictures, associates device identifiers and logins with "member profiles," searches based on location, and delivers search results that include "an image of a human face"; [1.2] users using mobile devices "capable of connecting to the internet"; [1.3] an app on each device that allows the users to access social network profiles; [1.4] the server stores the devices' locations; [1.5] the server determines the proximity of two users; [1.6] the server sends one user search results of other nearby members of the social network and sends a second user an invitation; [1.7] the server connects the two users "through a members-only-social-network communication tools [sic] . . . of SMS, E-mail, chat/instant messaging, multimedia, voice, and video"; and [1.8] the server sends the first user information about the second user.

"invite" is "accepted or rejected"; [1.6] storing the "connectivity" between the members and facilitating "a chat feature"; [1.7] the members "are members of a same social network" and disclosing profile information of nearby members "for the purpose of connecting members of the same social network"; and [1.8] the server allows members to connect even if one is offline.

Thus, like claim 10 of the '875 Patent, claim 1 of the '352 Patent, and claim 1 of the '267 Patent, claim 1 of the '397 Patent is directed to the abstract idea of social networking, such as matching people by their location.

D. The Asserted Patents Fail *Alice* Step Two Because the Claims, Which Are Performed Using Generic Computing Tools, Lack an Inventive Concept

The Asserted Patents fail *Alice* step two because the claims "mere[ly] recit[e] a generic computer," which is not an inventive concept that could "transform a patent-ineligible abstract idea into a patent-eligible invention." *Alice*, 573 U.S. at 223.

There is no inventive concept when the claims can be performed with "off-the-shelf, conventional computer, network, and display technology for gathering, sending, and presenting" data. *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1355 (Fed. Cir. 2016). In the social networking context, a claim lacks an inventive concept when it is directed to a "generic computer system" that "could be replaced with a human matchmaker who compares two individuals based on submitted or publicly available information, and then sends both chatters a message which prompts their meeting." *Jedi Techs.*, 2017 WL 3315279, at *8. Likewise, a claim that merely "recite[s] general steps for how individuals are matched or introduced" in "internet chatrooms" lacks an inventive concept. *Perry St.*, 548 F. Supp. 3d at 436.

All claims of the Asserted Patents lack an inventive concept for similar reasons. The patents describe a social networking process that employs "available technology and standard protocols available today," including a "standard cell phone," a "cellular phone network," "existing standard

EXHIBIT A

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION

WIRELESS DISCOVERY LLC, *Plaintiff*	§	
	§	
	§	**6:20-CV-00762-ADA**
-v-	§	
	§	
BUMBLE TRADING INC., BUMBLE HOLDING LTD., BADOO TRADING LTD., MAGIC LAB CO., WORLDWIDE VISION LIMITED, BADOO LIMITED, BADOO SOFTWARE LIMITED, BADOO TECHNOLOGIES LIMITED, CHAPPY LIMITED, LUMEN APP LIMITED *Defendants*	§	

CLAIM CONSTRUCTION ORDER

The Court held a *Markman* hearing on November 18, 2021. During that hearing, the Court provided its final constructions. The Court now enters those claim constructions.

SIGNED this 18th day of November, 2021.

ALAN D ALBRIGHT
UNITED STATES DISTRICT JUDGE

Term	Plaintiff's Proposed Construction	Defendants' Proposed Construction	Court's Preliminary Construction
#2: (1) "each [mobile communications device] operatively connected to any of a mobile telecommunications provider network and an internet connection to access said computing device" and (2) "said computing device connects said first mobile communications device and said second mobile communications device to the internet" '875 patent claim 1	Definite	Indefinite	Indefinite.
#3: "based on a latest static and dynamic location" ('267 patent claims 1, 10; '397 patent claims 1,9)	No construction necessary	"based on both a latest static and dynamic location"	Plain-and-ordinary meaning
#4: "to select members that said first user may wish to connect with" ('267 patent claims 1, 10)	No construction necessary	"in order to allow the first user to select members that said first user may wish to connect with"	Plain-and-ordinary meaning

Case: 23-1582 Document: 33 Page: 215 Filed: 10/04/2023

THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

WIRELESS DISCOVERY LLC	)	
	)	
Plaintiff,	)	**Civil Action No. 1:22-cv-00480-GBW**
v.	)	
	)	
EHARMONY, INC.,	)	
	)	
Defendant.	)	
	)	

PLAINTIFF WIRELESS DISCOVERY LLC'S RESPONSE
TO DEFENDANT'S MOTION TO DISMISS

representative of claims 2-15 of the 397 Patent. Contrary to the assertions made by defendant, one claim of each asserted patent is representative of all claims of the same patent.

C. Plaintiff has Plausibly Established that the Claims of the Asserted Patents Contain an Inventive Concept

Defendant incorrectly alleges that the claims of the Asserted Patents are directed to an abstract idea of using a computer and/or mobile phone to simply exchange information between the members of an organization based on certain rules. Rather, each of the Asserted Patents have claims that include inventive concepts.

1. The 267 Patent

The 267 Patent states:

> there is generally no form of communication using mobile devices that allows discovery by personal attributes for the purpose of exchanging contact information. Furthermore, generally there is no available technology adapted allowing mobile device users to easily exchange contacts and/or related personal information over the internet for the purpose of social interaction by way of mobile devices without limitations to hardware brands. [2]

Claim 10, for example, of the 267 patent recites "using said computing device to send to said first user upon inquiring of other members in said network of said first user, personal attributes of all other members based on proximity calculations to select members that said first user may wish to connect with…."[3] The inventive concept of easily exchanging contact and/or personal information over the internet for purposes of social interaction by way of mobile devices without limitations to hardware brands is described in the specification and captured in the claims. According to the specification, an inventive concept of the 267 Patent includes using mobile devices that allow for discovery of personal attributes for the purpose of exchanging contact information by way of mobile devices without limitations to hardware brands.[4] Thus, it

[2] Doc. No. 21-6 at Column 1, lines 32-39.
[3] Doc. No. 21-6; Column 17, lines 37-47.
[4] *Id.*

is plausible that the statements in the specification and the claims contain an inventive concept.

2. The 875 Patent

The 875 Patent states:

> There are methods to exchange contact information in the form of Vcards. But there is no form of communication using mobile devices that allows discovery by personal attributes for the purpose of exchanging contact information. Furthermore, there is no available technology adapted for allowing mobile device users to easily exchange contact and/or related personal information over the internet for the purpose of social interaction by way of mobile devices.[5]

Claim 10 of the 875 Patent recites "providing… access to stored user profile information about a first user using a respective first mobile communications device and a second user, using a respective second mobile communications… connecting… the first user and the second user through the computing device for personal communication between first user and the second user, the personal communication comprising one or more SMS, E-mail, chat/instant messaging, multimedia, voice or video."[6] The inventive concept that allows discovery of personal attributes for purposes of exchanging contact information including easily exchanging personal information for social interaction by way of mobile devices is described by the specification and captured in the claims of the 875 Patent. Thus, it is plausible that the statements in the specification and the claims contain an inventive concept.

3. The 397 Patent

The 397 Patent states that users of communication devices feel a need for exchanging contact information for enhancing social interaction.[7] As acknowledged by the U.S. Patent and Trademark Office in the Notice of Allowance for the 397 Patent (See Exhibit I), the specification and claims disclose novel concepts, namely as recited in claim 1:

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[5] See Doc. No. 21-5; at 1:31-38.
[6] Doc. No. 21-5; Column 17, line 46 to Column 8, line 8.
[7] Doc. No. 21-4, Column 1, lines 30-36.

wherein the server permits discoverable members to have their respective devices turned on or turned off at a time of a search being conducted by the first user, wherein the server permits the discoverable members to have their respective devices unconnected to an internet connection service at the time of the search being conducted by the first user, and wherein any of turned off devices and disconnected devices is discoverable by the server as the internet connection service is configured to report the any of turned off devices and disconnected devices as discoverable based on a latest static and dynamic location in proximity to the first user. [8]

Thus, it is plausible that the statements in the specification and the claims contain an inventive concept. For example, the inventive concept that allows for members to have their respective devices turned on or off while a search is conducted by a first user and still be discoverable.

4. The 352 Patent

The 352 Patent states:

mobile devices. There are methods to exchange contact information in the form of virtual cards (Vcards). However, there is generally no form of communication using mobile devices that allows discovery by personal attributes for the purpose of exchanging contact information. Furthermore, generally there is no available technology adapted allowing mobile device users to easily exchange contacts and/or related personal information over the internet for the purpose of social interaction by way of mobile devices without limitations to hardware brands. [9]

Claim 1 of the 352 Patent recites a "server configured to communicate with a first communication device of a first user and a second communication device of a second user over communication links comprising a cellular network, wherein the server comprises a processor configured to… associate each member profile with a unique hardware identification associated with the member devices; identify a unique ID of a second member in the vicinity and spatial proximity of a first member and provide the first member with the profile of the second member comprising a picture and name to facilitate a connection between both members. [10] Thus, it is

[8] Doc. No. 21-4; Column 24, Lines 4-15.
[9] Doc. No. 21-3; Column 1, lines 29-38.
[10] *Id*. at claims.

CLOSED,APPEAL,PATENT

U.S. District Court
District of Delaware (Wilmington)
CIVIL DOCKET FOR CASE #: 1:22-cv-00478-GBW

Wireless Discovery LLC v. Coffee Meets Bagel, Inc.
Assigned to: Judge Gregory B. Williams
Related Cases: 1:22-cv-00479-GBW
1:22-cv-00480-GBW
1:22-cv-00481-GBW
1:22-cv-00482-GBW
1:22-cv-00483-VAC
1:22-cv-00484-GBW
1:22-cv-00485-VAC-SRF
Case in other court: 23-01583
Cause: 35:271 Patent Infringement

Date Filed: 04/13/2022
Date Terminated: 02/06/2023
Jury Demand: Plaintiff
Nature of Suit: 830 Patent
Jurisdiction: Federal Question

Plaintiff

Wireless Discovery LLC

represented by **Jimmy C. Chong**
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William P. Ramey , III
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V.

Defendant

Coffee Meets Bagel, Inc.

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Counter Claimant

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(See above for address)
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ATTORNEY TO BE NOTICED

V.

Counter Defendant

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LEAD ATTORNEY
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Noel F. Chakkalakal
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Philip G. Brown
(See above for address)
ATTORNEY TO BE NOTICED

V.

Counter Defendant

Wireless Discovery LLC represented by **Jimmy C. Chong**
(See above for address)
LEAD ATTORNEY
ATTORNEY TO BE NOTICED

William P. Ramey , III
(See above for address)
ATTORNEY TO BE NOTICED

Date Filed	#	Docket Text
04/13/2022	1	COMPLAINT filed with Jury Demand against Coffee Meets Bagel, Inc. - Magistrate Consent Notice to Pltf. (Filing fee $ 402, receipt number ADEDC-3850980.) - filed by Wireless Discovery LLC. (Attachments: # 1 Exhibit A, # 2 Exhibit B, # 3 Related Cases, # 4 Civil Cover Sheet)(twk) (Entered: 04/14/2022)
04/13/2022	2	Notice, Consent and Referral forms re: U.S. Magistrate Judge jurisdiction. (twk) (Entered: 04/14/2022)
04/13/2022	3	Report to the Commissioner of Patents and Trademarks for Patent/Trademark Number(s) US 9,264,875. (twk) (Entered: 04/14/2022)
04/13/2022	4	Disclosure Statement pursuant to Rule 7.1: No Parents or Affiliates Listed filed by Wireless Discovery LLC. (twk) (Entered: 04/14/2022)
04/13/2022	5	Summonses Issued (please complete the top portion of the form and print out for use/service). (twk) (Entered: 04/14/2022)
04/20/2022		Case Assigned to Vacant Judgeship (2022). Please include initials of VAC after the case number on all documents filed. Associated Cases: 1:22-cv-00478-VAC through 1:22-cv-00485-VAC (rjb) (Entered: 04/20/2022)
04/20/2022	6	ORAL ORDER: This case has been assigned to the District of Delaware's Vacant Judgeship ("VAC"). Detailed information relating to VAC cases may be found in the Court's Announcement of March 3, 2022 and Standing Order No. 2022-VAC-1 (March 9, 2022), which are found on the Court's website. Consistent with the foregoing Announcement and Standing Order, IT IS HEREBY ORDERED that the parties shall file the "Notice of Consent or Absence of Consent to Proceed Before a United States Magistrate Judge," being docketed along with the instant order, no later than sixty (60) days after service of the Complaint on the first defendant that is served. IT IS FURTHER ORDERED that the Notice, Consent, and Referral forms re: U.S. Magistrate Judge jurisdiction, previously docketed in this case, are VACATED. Issued by the Clerk of Court on 4/20/2022. Associated Cases: 22cv478-VAC through 22cv485-VAC (ntl) (Entered: 04/20/2022)
04/20/2022	7	VAC Notice, Consent, Non-Consent, Magistrate Referral Associated Cases: 22cv478-VAC through 22cv485-VAC (ntl) (Entered: 04/20/2022)

04/21/2022	8	SUMMONS Returned Executed by Wireless Discovery LLC. Coffee Meets Bagel, Inc. served on 4/19/2022, answer due 5/10/2022. (Chong, Jimmy) (Entered: 04/21/2022)
06/15/2022	9	STIPULATION TO EXTEND TIME to Answer the Complaint to July 5, 2022 - filed by Coffee Meets Bagel, Inc.. (Anderson, Jeremy) (Entered: 06/15/2022)
06/16/2022		SO ORDERED, re 9 STIPULATION TO EXTEND TIME to Answer the Complaint to July 5, 2022 filed by Coffee Meets Bagel, Inc. -- Reset Answer Deadline: Coffee Meets Bagel, Inc. answer due 7/5/2022. ORDERED by Judge Colm F. Connolly on 6/16/22. (ntl) (Entered: 06/16/2022)
06/21/2022	10	VAC Magistrate Non-Consent completed by the parties filed by Wireless Discovery LLC. (Chong, Jimmy) (Entered: 06/21/2022)
06/21/2022	11	ORAL ORDER: The parties having filed the appropriate form advising the Court that they do not unanimously consent to the jurisdiction of a Magistrate Judge, IT IS HEREBY ORDERED that, until further order of the Court, this case will remain assigned to the VAC (2022) docket. IT IS FURTHER ORDERED that this case is referred to Magistrate Judge Sherry R. Fallon solely for the following purposes: (1) to adjudicate discovery (including fact and expert discovery) and protective order disputes; (2) to issue or modify a scheduling order; (3) to review stipulated orders and pro hac vice motions; and (4) to review requests for mediation in cases other than patent and securities cases. Issued by the Clerk of Court on 6/21/22. Associated Cases: 1:22-cv-00478-VAC, 1:22-cv-00480-VAC, 1:22-cv-00484-VAC (ntl) (Entered: 06/21/2022)
06/22/2022		ORAL ORDER RE: (D.I. 10 in 22-cv-478-VAC-SRF); (D.I. 15 in 22-cv-480-VAC-SRF) and (D.I. 16 in 22-cv-484-VAC-SRF): Pursuant to Paragraphs 5(b)-(c) of the Court's Standing Order No. 2022-VAC-1, IT IS HEREBY ORDERED THAT: (1) On or before June 29, 2022, the parties shall: (a) hold a Rule 26(f) conference; and (b) commence discovery. (2) The parties shall file a proposed scheduling order within 30 days of the Rule 26(f) conference and inform the Court as to whether the need for coordinated discovery is anticipated. The Court's form scheduling order is posted at www.ded.uscourts.gov/judge/magistrate-judge-sherry-r-fallon. If the parties have any suggestions or modifications to the standard form of scheduling order, they may be included in the proposed order for consideration by the Court. If any disputed issue exists regarding the proposed scheduling order, it shall be noted therein, along with the parties' proposed language on the issue for consideration by the Court; (3) A scheduling teleconference pursuant to Fed. R. Civ. P. 16(b) is set for **9/7/2022 at 11:00 a.m.** Ordered by Judge Sherry R. Fallon on 6/22/2022. Associated Cases: 1:22-cv-00478-VAC-SRF, 1:22-cv-00480-VAC-SRF, 1:22-cv-00484-VAC-SRF(lih) (Entered: 06/22/2022)
06/29/2022	12	Joint Motion For Continuance of Rule 26(f) Conference - filed by Coffee Meets Bagel, Inc.. (Attachments: # 1 Text of Proposed Order)(Anderson, Jeremy) Modified on 6/30/2022 (lih). (Entered: 06/29/2022)
06/30/2022		ORAL ORDER- GRANTING 12 Joint Motion For Continuance of Rule 26(f) Conference to July 15, 2022. Ordered by Judge Sherry R. Fallon on 6/30/2022. (lih) (Entered: 06/30/2022)
07/05/2022	13	MOTION to Dismiss for Failure to State a Claim - filed by Coffee Meets Bagel, Inc.. (Attachments: # 1 Text of Proposed Order)(Anderson, Jeremy) (Entered: 07/05/2022)
07/05/2022	14	OPENING BRIEF in Support re 13 MOTION to Dismiss for Failure to State a Claim filed by Coffee Meets Bagel, Inc..Answering Brief/Response due date per Local Rules is 7/19/2022. (Anderson, Jeremy) (Entered: 07/05/2022)
07/05/2022	15	ANSWER to 1 Complaint, with Jury Demand, COUNTERCLAIM against Wireless Discovery LLC by Coffee Meets Bagel, Inc..(Anderson, Jeremy) Modified on 7/6/2022

		(lih). (Entered: 07/05/2022)
07/05/2022	16	Disclosure Statement pursuant to Rule 7.1: No Parents or Affiliates Listed filed by Coffee Meets Bagel, Inc.. (Anderson, Jeremy) (Entered: 07/05/2022)
07/06/2022		ORAL ORDER re D.I. 13 Motion: In accordance with the Court's June 22, 2022 Oral Order and paragraph 5(g) of Standing Order No. 2022-VAC-1, the pending motion to dismiss (D.I. 13) does not fall within the scope of the referral to the undersigned judicial officer. Therefore, the motion will be addressed following the assignment of an Article III Judge. Pursuant to paragraph 5(f) of Standing Order No. 2022-VAC-1, the pending motion shall not be grounds to prevent the case from progressing and briefing shall be completed in accordance with the Local Rules. Ordered by Judge Sherry R. Fallon on 7/6/2022. (lih) (Entered: 07/06/2022)
07/18/2022	17	AMENDED COMPLAINT for Patent Infringement against Coffee Meets Bagel, Inc.- filed by Wireless Discovery LLC. (Attachments: # 1 Exhibit, # 2 Exhibit, # 3 Exhibit, # 4 Exhibit, # 5 Exhibit, # 6 Exhibit)(Chong, Jimmy) Modified on 7/19/2022 (lih). (Entered: 07/18/2022)
07/19/2022	18	MOTION for Pro Hac Vice Appearance of Attorney William P Ramey, III - filed by Wireless Discovery LLC. (Chong, Jimmy) (Entered: 07/19/2022)
07/20/2022		SO ORDERED- re 18 MOTION for Pro Hac Vice Appearance of Attorney William P Ramey, III. Signed by Judge Sherry R. Fallon on 7/20/2022. (lih) (Entered: 07/20/2022)
07/20/2022	19	MOTION for Pro Hac Vice Appearance of Attorney Neil J. McNabnay, Lance E. Wyatt, Noel F. Chakkalakal and Philip G. Brown - filed by Coffee Meets Bagel, Inc.. (Anderson, Jeremy) (Entered: 07/20/2022)
07/20/2022		SO ORDERED- re 19 MOTION for Pro Hac Vice Appearance of Attorney Neil J. McNabnay, Lance E. Wyatt, Noel F. Chakkalakal and Philip G. Brown. Signed by Judge Sherry R. Fallon on 7/20/2022. (lih) (Entered: 07/20/2022)
07/20/2022		Pro Hac Vice Attorney William P. Ramey, III for Wireless Discovery LLC added for electronic noticing. Pursuant to Local Rule 83.5 (d)., Delaware counsel shall be the registered users of CM/ECF and shall be required to file all papers. (mpb) (Entered: 07/20/2022)
07/25/2022		Pro Hac Vice Attorney Neil J. McNabnay, Philip G. Brown, Lance E. Wyatt, and Noel F. Chakkalakal for Coffee Meets Bagel, Inc. added for electronic noticing. Pursuant to Local Rule 83.5 (d)., Delaware counsel shall be the registered users of CM/ECF and shall be required to file all papers. (mpb) (Entered: 07/25/2022)
07/27/2022		CORRECTING ENTRY: The answer previously filed as D.I. 20 has been deleted due to document having the wrong case caption. Counsel is advised the file a revised version of the document with the correct case caption. (lih) (Entered: 07/27/2022)
07/27/2022		CORRECTING ENTRY: The document previously filed as D.I. 21 has been deleted. Counsel is advised that the document was a duplicate version of D.I. 20 that was previously deleted for having the incorrect case caption. (lih) (Entered: 07/27/2022)
07/27/2022	20	ANSWER to 15 Answer to Complaint, Counterclaim by Wireless Discovery LLC.(Chong, Jimmy) (Entered: 07/27/2022)
07/27/2022	21	STIPULATION TO EXTEND TIME to ANSWER First Amended Complaint to August 31, 2022 - filed by Coffee Meets Bagel, Inc.. (Anderson, Jeremy) (Entered: 07/27/2022)
07/28/2022		SO ORDERED- re 21 STIPULATION TO EXTEND TIME to ANSWER First Amended Complaint to August 31, 2022. Reset Answer Deadlines: Coffee Meets Bagel, Inc. answer

		due 8/31/2022. Signed by Judge Sherry R. Fallon on 7/28/2022. (lih) (Entered: 07/28/2022)
08/16/2022	22	PROPOSED Scheduling Order by Wireless Discovery LLC. (Chong, Jimmy) Modified on 8/16/2022 (lih). (Entered: 08/16/2022)
08/25/2022	23	MOTION for Jimmy Chong to Withdraw as Attorney - filed by Wireless Discovery LLC. (Chong, Jimmy) (Entered: 08/25/2022)
08/31/2022	24	MOTION to Dismiss for Failure to State a Claim - filed by Coffee Meets Bagel, Inc.. (Attachments: # 1 Text of Proposed Order)(Anderson, Jeremy) (Entered: 08/31/2022)
08/31/2022	25	OPENING BRIEF in Support re 24 MOTION to Dismiss for Failure to State a Claim filed by Coffee Meets Bagel, Inc..Answering Brief/Response due date per Local Rules is 9/14/2022. (Anderson, Jeremy) (Entered: 08/31/2022)
08/31/2022	26	ANSWER to 17 Amended Complaint, with Jury Demand Affirmative Defenses and, COUNTERCLAIM against Wireless Discovery LLC by Coffee Meets Bagel, Inc.. (Anderson, Jeremy) Modified on 9/7/2022 (lih). (Entered: 08/31/2022)
09/06/2022	27	SCHEDULING ORDER: Joinder of Parties due by 9/1/2022. Amended Pleadings due by 9/1/2022. Discovery due by 9/1/2023. Opening Expert Reports due by 5/1/2023. Rebuttal Expert Reports due by 6/1/2023. Dispositive Motions due by 9/1/2023. Claim Construction Opening Brief due by 11/1/2022. Claim Construction Answering Brief due by 12/1/2022. Claim Construction Reply Brief due by 12/15/2022. Claim Construction Surreply Brief due by 1/3/2023. Joint Claim Construction Brief due by 1/10/2023. IT IS FURTHER ORDERED that the Rule 16 scheduling teleconference set for September 7, 2022 is CANCELLED. Signed by Judge Sherry R. Fallon on 9/6/2022. (Polito, Rebecca) (Entered: 09/06/2022)
09/08/2022		Case Reassigned to Judge Gregory B. Williams. Please include the initials of the Judge (GBW) after the case number on all documents filed. (smg) (Entered: 09/08/2022)
09/09/2022	28	STIPULATION TO EXTEND TIME Response to Motion to Dismiss and Claim Construction Deadlines to Certain Deadlines - filed by Coffee Meets Bagel, Inc.. (Anderson, Jeremy) (Entered: 09/09/2022)
09/12/2022		SO ORDERED, re 28 STIPULATION TO EXTEND TIME Response to Motion to Dismiss and Claim Construction Deadlines to Certain Deadlines filed by Coffee Meets Bagel, Inc. Signed by Judge Gregory B. Williams on 9/12/2022. (etg) (Entered: 09/13/2022)
09/20/2022	29	ANSWER to 26 Answer to Amended Complaint, Counterclaim by Wireless Discovery LLC.(Chong, Jimmy) (Entered: 09/20/2022)
09/26/2022		ORAL ORDER: IT IS HEREBY ORDERED that this matter is no longer referred to Magistrate Judge Fallon. ORDERED by Judge Gregory B. Williams on 9/26/22. Associated Cases: 1:22-cv-00478-GBW-SRF et al. (ntl) (Entered: 09/26/2022)
10/05/2022	30	ANSWERING BRIEF in Opposition re 24 MOTION to Dismiss for Failure to State a Claim filed by Wireless Discovery LLC.Reply Brief due date per Local Rules is 10/12/2022. (Attachments: # 1 Text of Proposed Order, # 2 Exhibit)(Chong, Jimmy) (Entered: 10/05/2022)
10/06/2022	31	PROPOSED ORDER Proposed Protective Order by Wireless Discovery LLC. (Chong, Jimmy) (Entered: 10/06/2022)
10/07/2022		SO ORDERED, re 31 Proposed Protective Order filed by Wireless Discovery LLC. Signed by Judge Gregory B. Williams on 10/7/2022. (etg) (Entered: 10/07/2022)

10/11/2022	32	STIPULATION TO EXTEND TIME to Respond to Motion to Dismiss to October 26, 2022 - filed by Coffee Meets Bagel, Inc.. (Anderson, Jeremy) (Entered: 10/11/2022)
10/12/2022		SO ORDERED, re 32 STIPULATION TO EXTEND TIME to Respond to Motion to Dismiss to October 26, 2022 filed by Coffee Meets Bagel, Inc. Signed by Judge Gregory B. Williams on 10/12/22. (ntl) (Entered: 10/12/2022)
10/19/2022	33	PROPOSED ORDER [Proposed] Scheduling Order by Coffee Meets Bagel, Inc.. (Attachments: # 1 Letter to Hon. Gregory B. Williams Enclosing Proposed Scheduling Order)(Anderson, Jeremy) (Entered: 10/19/2022)
10/21/2022	34	ORAL ORDER: The Court has reviewed the parties' letter of October 19, 2022 and the new proposed scheduling orders. The new proposed scheduling orders do not contain certain language included the Court's form scheduling order which was updated as of October 18, 2022. No later than October 26, 2022, the parties should resubmit their new proposed scheduling orders utilizing the Court's updated form scheduling order as of October 18, 2022. The Court will consider the proposed dates for Pretrial Conferences and Trial in the proposed scheduling orders and adjust those dates if necessary. ORDERED by Judge Gregory B. Williams on 10/21/22. Associated Cases: 1:22-cv-00478-GBW, 1:22-cv-00479-GBW, 1:22-cv-00481-GBW, 1:22-cv-00482-GBW (ntl) (Entered: 10/21/2022)
10/21/2022	35	PROPOSED ORDER [Proposed] Scheduling Order re 33 Proposed Order by Coffee Meets Bagel, Inc.. (Anderson, Jeremy) (Entered: 10/21/2022)
10/26/2022	36	REPLY BRIEF re 24 MOTION to Dismiss for Failure to State a Claim filed by Coffee Meets Bagel, Inc.. (Anderson, Jeremy) (Entered: 10/26/2022)
11/01/2022	37	SCHEDULING ORDER: Fact Discovery completed by 9/1/2023. Status Report due by 5/1/2023. Dispositive Motions due by 12/11/2023. Joint Claim Construction Brief due by 4/17/2023. A Markman Hearing is set for 5/31/2023 at 10:00 AM in Courtroom 6B before Judge Gregory B. Williams. A Final Pretrial Conference is set for 4/5/2024 at 10:00 AM in Courtroom 6B before Judge Gregory B. Williams. A 5-day Jury Trial is set for 4/15/2024 at 09:30 AM in Courtroom 6B before Judge Gregory B. Williams. Signed by Judge Gregory B. Williams on 11/1/22. (ntl) (Entered: 11/01/2022)
11/02/2022	38	REQUEST for Oral Argument by Coffee Meets Bagel, Inc. re 24 MOTION to Dismiss for Failure to State a Claim . (Anderson, Jeremy) (Entered: 11/02/2022)
11/04/2022	39	ORAL ORDER: IT IS HEREBY ORDERED that the Court will hear oral argument on Defendants' Motion to Dismiss, No. 22-478, D.I. 24; No. 22-479, D.I. 25; No. 22-281, D.I 27; No. 22-482, D.I. 25, on December 14, 2022 beginning at 10:00 a.m. in Courtroom 6B. Each side will be allocated up to thirty (30) minutes to present its argument. ORDERED by Judge Gregory B. Williams on 11/4/2022. Associated Cases: 1:22-cv-00478-GBW, 1:22-cv-00479-GBW, 1:22-cv-00481-GBW, 1:22-cv-00482-GBW (etg) (Entered: 11/04/2022)
11/08/2022	40	Letter to The Honorable Gregory B. Williams from Jimmy Chong regarding being excused from the December 14, 2022 Hearing - re (39 in 1:22-cv-00478-GBW, 39 in 1:22-cv-00478-GBW, 40 in 1:22-cv-00482-GBW, 40 in 1:22-cv-00482-GBW, 40 in 1:22-cv-00479-GBW, 40 in 1:22-cv-00479-GBW, 42 in 1:22-cv-00481-GBW, 42 in 1:22-cv-00481-GBW) Order,, Set Hearings,. (Chong, Jimmy) (Entered: 11/08/2022)
11/17/2022	41	ORAL ORDER: For purposes of analyzing the motion to dismiss based on invalidity pursuant to 35 U.S.C. § 101, IT IS HEREBY ORDERED that, no later than November 30, 2022, each side shall file a one (1) page letter identifying which U.S. Supreme Court or Federal Circuit case(s) it contends is most similar to the patent(s)-at issue. ORDERED by

		Judge Gregory B. Williams on 11/17/22. Associated Cases: 1:22-cv-00478-GBW et al. (ntl) (Entered: 11/17/2022)
11/30/2022	42	Letter to The Honorable Gregory B. Williams from Jimmy Chong and William P. Ramey III regarding In response to Court's November 17, 2022 Order - re (41 in 1:22-cv-00478-GBW, 34 in 1:22-cv-00484-GBW, 44 in 1:22-cv-00481-GBW, 44 in 1:22-cv-00480-GBW, 42 in 1:22-cv-00479-GBW, 42 in 1:22-cv-00482-GBW) Order,. (Attachments: # 1 Exhibit) (Chong, Jimmy) (Entered: 11/30/2022)
11/30/2022	43	Letter to The Honorable Gregory B. Williams from Jeremy D. Anderson regarding Letter Brief Requested by Court in November 17, 2022 Oral Order. (Anderson, Jeremy) (Entered: 11/30/2022)
12/14/2022		Minute Entry for proceedings held before Judge Gregory B. Williams - Oral Argument held on 12/14/2022. (Court Reporter: Deanna Warner) Associated Cases: 1:22-cv-00478-GBW et al. (ntl) (Entered: 12/14/2022)
01/26/2023	44	Letter to The Honorable Gregory B. Williams from Jeffrey J. Lyons regarding Request for Guidance on Anticipated Motions to Stay by All Defendants. (Lyons, Jeffrey) (Entered: 01/26/2023)
01/30/2023	45	NOTICE OF SERVICE of Defendants' Initial Claim Terms and Proposed Construction filed by Hily Corp., Coffee Meets Bagel, Inc., Grindr, Inc., Down App, Inc..(Anderson, Jeremy) (Entered: 01/30/2023)
02/06/2023	46	MEMORANDUM ORDER: IT IS HEREBY ORDERED that Defendants' Motion to Dismiss (No. 22-478, D.I. 24; No. 22-479, D.I. 25; No. 22- 481, D.I. 27; No. 22-482, D.I. 25) is GRANTED. Signed by Judge Gregory B. Williams on 2/6/23. Associated Cases: 1:22-cv-00478-GBW, 1:22-cv-00479-GBW, 1:22-cv-00481-GBW, 1:22-cv-00482-GBW (ntl) (Entered: 02/06/2023)
02/06/2023		CASE CLOSED (ntl) (Entered: 02/06/2023)
02/07/2023	47	Report to the Commissioner of Patents and Trademarks (Attachments: # 1 order)(ntl) (Entered: 02/07/2023)
03/06/2023	48	NOTICE OF APPEAL to the Federal Circuit of 46 Memorandum and Order, . Appeal filed by Wireless Discovery LLC. (Chong, Jimmy) (Entered: 03/06/2023)
03/06/2023		APPEAL - Credit Card Payment of $505.00 received re 48 Notice of Appeal (Federal Circuit) filed by Wireless Discovery LLC. (Filing fee $505, receipt number ADEDC-4082159.) (Chong, Jimmy) (Entered: 03/06/2023)
03/06/2023		Notice of Appeal and Docket Sheet to US Court of Appeals for the Federal Circuit re 48 Notice of Appeal (Federal Circuit). (smg) (Entered: 03/06/2023)
03/15/2023	49	NOTICE of Docketing Record on Appeal from USCA for the Federal Circuit re 48 Notice of Appeal (Federal Circuit) filed by Wireless Discovery LLC. USCA Case Number 2023-1583. (ntl) (Entered: 03/16/2023)

PACER Service Center			
Transaction Receipt			
05/09/2023 12:45:12			
PACER Login:	achachkes3748	**Client Code:**	

Description:	Docket Report	**Search Criteria:**	1:22-cv-00478-GBW Start date: 1/1/1975 End date: 5/9/2023
Billable Pages:	8	**Cost:**	0.80

CLOSED,APPEAL,PATENT

U.S. District Court
District of Delaware (Wilmington)
CIVIL DOCKET FOR CASE #: 1:22-cv-00479-GBW

Wireless Discovery LLC v. Down App, Inc.
Assigned to: Judge Gregory B. Williams
Related Cases: 1:22-cv-00478-GBW
1:22-cv-00480-GBW
1:22-cv-00481-GBW
1:22-cv-00482-GBW
1:22-cv-00483-VAC
1:22-cv-00484-GBW
1:22-cv-00485-VAC-SRF
Case in other court: 23-01584
Cause: 35:271 Patent Infringement

Date Filed: 04/13/2022
Date Terminated: 02/06/2023
Jury Demand: Plaintiff
Nature of Suit: 830 Patent
Jurisdiction: Federal Question

Plaintiff

Wireless Discovery LLC

represented by **Jimmy C. Chong**
Chong Law Firm, PA
2961 Centerville Rd., Ste 350
Wilmington, DE 19808
302-999-9480
Fax: 302-800-1999
Email: chong@chonglawfirm.com
LEAD ATTORNEY
ATTORNEY TO BE NOTICED

William P. Ramey , III
Email: wramey@rameyfirm.com
PRO HAC VICE
ATTORNEY TO BE NOTICED

V.

Defendant

Down App, Inc.

represented by **Jeremy Douglas Anderson**
Fish & Richardson, P.C.
222 Delaware Avenue, 17th Floor
P.O. Box 1114
Wilmington, DE 19899-1114
302-778-8452
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LEAD ATTORNEY
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PRO HAC VICE
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Philip G. Brown
Email: pgbrown@fr.com
PRO HAC VICE
ATTORNEY TO BE NOTICED

Counter Claimant

Down App, Inc. represented by **Jeremy Douglas Anderson**
(See above for address)
LEAD ATTORNEY
ATTORNEY TO BE NOTICED

V.

Counter Defendant

Wireless Discovery LLC represented by **Jimmy C. Chong**
(See above for address)
LEAD ATTORNEY
ATTORNEY TO BE NOTICED

Counter Claimant

Down App, Inc. represented by **Jeremy Douglas Anderson**
(See above for address)
LEAD ATTORNEY
ATTORNEY TO BE NOTICED

Lance E. Wyatt , Jr.
(See above for address)
PRO HAC VICE
ATTORNEY TO BE NOTICED

Neil J. McNabnay
(See above for address)
ATTORNEY TO BE NOTICED

Noel F. Chakkalakal
(See above for address)
ATTORNEY TO BE NOTICED

Philip G. Brown
(See above for address)
ATTORNEY TO BE NOTICED

V.

Counter Defendant

Wireless Discovery LLC represented by **Jimmy C. Chong**
(See above for address)
LEAD ATTORNEY
ATTORNEY TO BE NOTICED

William P. Ramey , III
(See above for address)
ATTORNEY TO BE NOTICED

Date Filed	#	Docket Text
04/13/2022	1	COMPLAINT filed with Jury Demand against Down App, Inc. - Magistrate Consent Notice to Pltf. (Filing fee $ 402, receipt number ADEDC-3850984.) - filed by Wireless Discovery LLC. (Attachments: # 1 Exhibit A, # 2 Exhibit B, # 3 Related Cases, # 4 Civil Cover Sheet)(twk) (Entered: 04/14/2022)
04/13/2022	2	Notice, Consent and Referral forms re: U.S. Magistrate Judge jurisdiction. (twk) (Entered: 04/14/2022)
04/13/2022	3	Report to the Commissioner of Patents and Trademarks for Patent/Trademark Number(s) US 9,264,875. (twk) (Entered: 04/14/2022)
04/13/2022	4	Disclosure Statement pursuant to Rule 7.1: No Parents or Affiliates Listed filed by Wireless Discovery LLC. (twk) (Entered: 04/14/2022)
04/13/2022	5	Summonses Issued (please complete the top portion of the form and print out for use/service). (twk) (Entered: 04/14/2022)
04/18/2022	6	SUMMONS Returned Executed by Wireless Discovery LLC. Down App, Inc. served on 4/15/2022, answer due 5/6/2022. (Chong, Jimmy) (Entered: 04/18/2022)
04/20/2022		Case Assigned to Vacant Judgeship (2022). Please include initials of VAC after the case number on all documents filed. Associated Cases: 1:22-cv-00478-VAC through 1:22-cv-00485-VAC (rjb) (Entered: 04/20/2022)
04/20/2022	7	ORAL ORDER: This case has been assigned to the District of Delaware's Vacant Judgeship ("VAC"). Detailed information relating to VAC cases may be found in the Court's Announcement of March 3, 2022 and Standing Order No. 2022-VAC-1 (March 9, 2022), which are found on the Court's website. Consistent with the foregoing Announcement and Standing Order, IT IS HEREBY ORDERED that the parties shall file the "Notice of Consent or Absence of Consent to Proceed Before a United States Magistrate Judge," being docketed along with the instant order, no later than sixty (60) days after service of the Complaint on the first defendant that is served. IT IS FURTHER ORDERED that the Notice, Consent, and Referral forms re: U.S. Magistrate Judge jurisdiction, previously docketed in this case, are VACATED. Issued by the Clerk of Court on 4/20/2022. Associated Cases: 22cv478-VAC through 22cv485-VAC (ntl) (Entered: 04/20/2022)

04/20/2022	8	VAC Notice, Consent, Non-Consent, Magistrate Referral Associated Cases: 22cv478-VAC through 22cv485-VAC (ntl) (Entered: 04/20/2022)
05/17/2022	9	STIPULATION TO EXTEND TIME to Answer the Complaint to 06/05/2022 - filed by Wireless Discovery LLC. (Chong, Jimmy) (Entered: 05/17/2022)
05/18/2022		SO ORDERED re 9 STIPULATION TO EXTEND TIME to answer, move, or otherwise respond to the Complaint to 06/05/2022 (Set/Reset Answer Deadlines: Down App, Inc. answer due 6/5/2022). ORDERED by Judge Maryellen Noreika on 5/18/2022. (dlw) (Entered: 05/18/2022)
06/03/2022	10	STIPULATION TO EXTEND TIME to Answer the Complaint to 07/05/2022 - filed by Wireless Discovery LLC. (Chong, Jimmy) (Entered: 06/03/2022)
06/03/2022		SO ORDERED, re 10 STIPULATION TO EXTEND TIME to Answer the Complaint to 07/05/2022 - filed by Wireless Discovery LLC. Reset Answer Deadlines: Down App, Inc. answer due 7/5/2022. Signed by Judge Richard G. Andrews on 6/3/2022. (etg) (Entered: 06/03/2022)
06/24/2022	11	VAC Magistrate Non-Consent completed by the parties filed by Wireless Discovery LLC. (Chong, Jimmy) (Entered: 06/24/2022)
06/24/2022	12	ORAL ORDER: The parties having filed the appropriate form advising the Court that they do not unanimously consent to the jurisdiction of a Magistrate Judge, IT IS HEREBY ORDERED that, until further order of the Court, this case will remain assigned to the VAC (2022) docket. IT IS FURTHER ORDERED that this case is referred to Magistrate Judge Sherry R. Fallon solely for the following purposes: (1) to adjudicate discovery (including fact and expert discovery) and protective order disputes; (2) to issue or modify a scheduling order; (3) to review stipulated orders and pro hac vice motions; and (4) to review requests for mediation in cases other than patent and securities cases. Issued by the Clerk of Court on 6/24/22. (ntl) (Entered: 06/24/2022)
06/24/2022		ORAL ORDER RE: 11 : Pursuant to Paragraphs 5(b)-(c) of the Court's Standing Order No. 2022-VAC-1, IT IS HEREBY ORDERED THAT: (1) On or before July 1, 2022, the parties shall: (a) hold a Rule 26(f) conference; and (b) commence discovery. (2) The parties shall file a proposed scheduling order within 30 days of the Rule 26(f) conference and inform the Court as to whether the need for coordinated discovery is anticipated as to related Civil Action No. 22-478-VAC-SRF; 22-480-VAC-SRF; 22-481-VAC-SRF and 22-484-VAC-SRF. The Court's form scheduling order is posted at www.ded.uscourts.gov/judge/magistrate-judge-sherry-r-fallon. If the parties have any suggestions or modifications to the standard form of scheduling order, they may be included in the proposed order for consideration by the Court. If any disputed issue exists regarding the proposed scheduling order, it shall be noted therein, along with the parties' proposed language on the issue for consideration by the Court; (3) A scheduling teleconference pursuant to Fed. R. Civ. P. 16(b) is set for **9/7/2022 at 11:00 a.m.** Ordered by Judge Sherry R. Fallon on 6/24/2022. (lih) (Entered: 06/24/2022)
06/29/2022	13	Joint Motion for Continuance of Rule 26(f) Conference - filed by Down App, Inc.. (Attachments: # 1 Text of Proposed Order)(Anderson, Jeremy) Modified on 6/30/2022 (lih). (Entered: 06/29/2022)
06/30/2022		ORAL ORDER- GRANTING 13 Joint Motion for Continuance of Rule 26(f) Conference to July 15, 2022. Ordered by Judge Sherry R. Fallon on 6/30/2022. (lih) (Entered: 06/30/2022)
07/05/2022	14	MOTION to Dismiss for Failure to State a Claim - filed by Down App, Inc.. (Attachments: # 1 Text of Proposed Order)(Anderson, Jeremy) (Entered: 07/05/2022)

07/05/2022	15	OPENING BRIEF in Support re 14 MOTION to Dismiss for Failure to State a Claim filed by Down App, Inc..Answering Brief/Response due date per Local Rules is 7/19/2022. (Anderson, Jeremy) (Entered: 07/05/2022)
07/05/2022	16	ANSWER to 1 Complaint, with Jury Demand, COUNTERCLAIM against Wireless Discovery LLC by Down App, Inc..(Anderson, Jeremy) Modified on 7/6/2022 (lih). (Entered: 07/05/2022)
07/05/2022	17	Disclosure Statement pursuant to Rule 7.1: No Parents or Affiliates Listed filed by Down App, Inc.. (Anderson, Jeremy) (Entered: 07/05/2022)
07/06/2022		ORAL ORDER re D.I. 14 Motion: In accordance with the Court's June 24, 2022 Oral Order and paragraph 5(g) of Standing Order No. 2022-VAC-1, the pending motion to dismiss (D.I. 14) does not fall within the scope of the referral to the undersigned judicial officer. Therefore, the motion will be addressed following the assignment of an Article III Judge. Pursuant to paragraph 5(f) of Standing Order No. 2022-VAC-1, the pending motion shall not be grounds to prevent the case from progressing and briefing shall be completed in accordance with the Local Rules. Ordered by Judge Sherry R. Fallon on 7/6/2022. (lih) (Entered: 07/06/2022)
07/18/2022	18	AMENDED COMPLAINT for Patent Infringement against Down App, Inc.- filed by Wireless Discovery LLC. (Attachments: # 1 Exhibit, # 2 Exhibit, # 3 Exhibit, # 4 Exhibit, # 5 Exhibit, # 6 Exhibit)(Chong, Jimmy) Modified on 7/18/2022 (lih). (Entered: 07/18/2022)
07/19/2022	19	MOTION for Pro Hac Vice Appearance of Attorney William P Ramey, III - filed by Wireless Discovery LLC. (Chong, Jimmy) (Entered: 07/19/2022)
07/20/2022		SO ORDERED- re 19 MOTION for Pro Hac Vice Appearance of Attorney William P Ramey, III. Signed by Judge Sherry R. Fallon on 7/20/2022. (lih) (Entered: 07/20/2022)
07/20/2022	20	MOTION for Pro Hac Vice Appearance of Attorney Neil J. McNabnay, Lance E. Wyatt, Noel F. Chakkalakal and Philip G. Brown - filed by Down App, Inc.. (Anderson, Jeremy) (Entered: 07/20/2022)
07/20/2022		SO ORDERED- re 20 MOTION for Pro Hac Vice Appearance of Attorney Neil J. McNabnay, Lance E. Wyatt, Noel F. Chakkalakal and Philip G. Brown. Signed by Judge Sherry R. Fallon on 7/20/2022. (lih) (Entered: 07/20/2022)
07/21/2022		Pro Hac Vice Attorney William P. Ramey, III for Wireless Discovery LLC added for electronic noticing. Pursuant to Local Rule 83.5 (d)., Delaware counsel shall be the registered users of CM/ECF and shall be required to file all papers. (mpb) (Entered: 07/21/2022)
07/25/2022		Pro Hac Vice Attorney Neil J. McNabnay, Philip G. Brown, Noel F. Chakkalakal, and Lance E. Wyatt for Down App, Inc. added for electronic noticing. Pursuant to Local Rule 83.5 (d)., Delaware counsel shall be the registered users of CM/ECF and shall be required to file all papers. (mpb) (Entered: 07/25/2022)
07/27/2022		CORRECTING ENTRY: The answer previously filed as D.I. 21 has been deleted due to document having the wrong plaintiff/counter-defendant listed in the title of the document. Counsel is advised to file a revised version of the document with the correct case information. (lih) (Entered: 07/27/2022)
07/27/2022	21	ANSWER to 16 Answer to Complaint, Counterclaim by Wireless Discovery LLC.(Chong, Jimmy) (Entered: 07/27/2022)
07/27/2022	22	STIPULATION TO EXTEND TIME to ANSWER First Amended Complaint to August

		31, 2022 - filed by Down App, Inc.. (Anderson, Jeremy) (Entered: 07/27/2022)
07/28/2022		SO ORDERED- re 22 STIPULATION TO EXTEND TIME to ANSWER First Amended Complaint to August 31, 2022. Reset Answer Deadlines: Down App, Inc. answer due 8/31/2022. Signed by Judge Sherry R. Fallon on 7/28/2022. (lih) (Entered: 07/28/2022)
08/16/2022	23	PROPOSED Scheduling Order by Wireless Discovery LLC. (Chong, Jimmy) Modified on 8/16/2022 (lih). (Entered: 08/16/2022)
08/25/2022	24	MOTION for Jimmy Chong to Withdraw as Attorney - filed by Wireless Discovery LLC. (Chong, Jimmy) (Entered: 08/25/2022)
08/31/2022	25	MOTION to Dismiss for Failure to State a Claim - filed by Down App, Inc.. (Attachments: # 1 Text of Proposed Order)(Anderson, Jeremy) (Entered: 08/31/2022)
08/31/2022	26	OPENING BRIEF in Support re 25 MOTION to Dismiss for Failure to State a Claim filed by Down App, Inc..Answering Brief/Response due date per Local Rules is 9/14/2022. (Anderson, Jeremy) (Entered: 08/31/2022)
08/31/2022	27	ANSWER to 18 Amended Complaint with Jury Demand Affirmative Defenses and, COUNTERCLAIM against Wireless Discovery LLC by Down App, Inc..(Anderson, Jeremy) Modified on 9/7/2022 (lih). (Entered: 08/31/2022)
09/06/2022	28	SCHEDULING ORDER: Joinder of Parties due by 9/1/2022. Amended Pleadings due by 9/1/2022. Discovery due by 9/1/2023. Opening Expert Reports due by 5/1/2023. Rebuttal Expert Reports due by 6/1/2023. Dispositive Motions due by 9/1/2023. Claim Construction Opening Brief due by 11/1/2022. Claim Construction Answering Brief due by 12/1/2022. Claim Construction Reply Brief due by 12/15/2022. Claim Construction Surreply Brief due by 1/3/2023. Joint Claim Construction Brief due by 1/10/2023. IT IS FURTHER ORDERED that the Rule 16 scheduling teleconference set for September 7, 2022 is CANCELLED. Signed by Judge Sherry R. Fallon on 9/6/2022. (Polito, Rebecca) (Entered: 09/06/2022)
09/08/2022		Case Reassigned to Judge Gregory B. Williams. Please include the initials of the Judge (GBW) after the case number on all documents filed. (smg) (Entered: 09/08/2022)
09/09/2022	29	STIPULATION TO EXTEND TIME Response to Motion to Dismiss and Claim Construction Deadlines to Certain Dates - filed by Down App, Inc.. (Anderson, Jeremy) (Entered: 09/09/2022)
09/12/2022		SO ORDERED, re 29 STIPULATION TO EXTEND TIME Response to Motion to Dismiss and Claim Construction Deadlines to Certain Dates filed by Down App, Inc. Signed by Judge Gregory B. Williams on 9/12/2022. (etg) (Entered: 09/13/2022)
09/20/2022	30	ANSWER to 27 Answer to Amended Complaint, Counterclaim by Wireless Discovery LLC.(Chong, Jimmy) (Entered: 09/20/2022)
09/26/2022		ORAL ORDER: IT IS HEREBY ORDERED that this matter is no longer referred to Magistrate Judge Fallon. ORDERED by Judge Gregory B. Williams on 9/26/22. Associated Cases: 1:22-cv-00478-GBW-SRF et al. (ntl) (Entered: 09/26/2022)
10/05/2022	31	ANSWERING BRIEF in Opposition re 25 MOTION to Dismiss for Failure to State a Claim filed by Wireless Discovery LLC.Reply Brief due date per Local Rules is 10/12/2022. (Attachments: # 1 Text of Proposed Order, # 2 Exhibit)(Chong, Jimmy) (Entered: 10/05/2022)
10/06/2022	32	PROPOSED ORDER Proposed Protective Order by Wireless Discovery LLC. (Chong, Jimmy) (Entered: 10/06/2022)

10/07/2022		SO ORDERED, re 32 Proposed Protective Order filed by Wireless Discovery LLC. Signed by Judge Gregory B. Williams on 10/7/2022. (etg) (Entered: 10/07/2022)
10/11/2022	33	STIPULATION TO EXTEND TIME to Respond to Motion to Dismiss to October 26, 2022 - filed by Down App, Inc.. (Anderson, Jeremy) (Entered: 10/11/2022)
10/12/2022		SO ORDERED, re 33 STIPULATION TO EXTEND TIME to Respond to Motion to Dismiss to October 26, 2022 filed by Down App, Inc. Signed by Judge Gregory B. Williams on 10/12/22. (ntl) (Entered: 10/12/2022)
10/19/2022	34	PROPOSED ORDER [Proposed] Scheduling Order by Down App, Inc.. (Attachments: # 1 Letter to Hon. Gregory B. Williams Enclosing Proposed Scheduling Order)(Anderson, Jeremy) (Entered: 10/19/2022)
10/21/2022	35	ORAL ORDER: The Court has reviewed the parties' letter of October 19, 2022 and the new proposed scheduling orders. The new proposed scheduling orders do not contain certain language included the Court's form scheduling order which was updated as of October 18, 2022. No later than October 26, 2022, the parties should resubmit their new proposed scheduling orders utilizing the Court's updated form scheduling order as of October 18, 2022. The Court will consider the proposed dates for Pretrial Conferences and Trial in the proposed scheduling orders and adjust those dates if necessary. ORDERED by Judge Gregory B. Williams on 10/21/22. Associated Cases: 1:22-cv-00478-GBW, 1:22-cv-00479-GBW, 1:22-cv-00481-GBW, 1:22-cv-00482-GBW (ntl) (Entered: 10/21/2022)
10/21/2022	36	PROPOSED ORDER [Proposed] Scheduling Order re 34 Proposed Order by Down App, Inc.. (Anderson, Jeremy) (Entered: 10/21/2022)
10/26/2022	37	REPLY BRIEF re 25 MOTION to Dismiss for Failure to State a Claim filed by Down App, Inc.. (Anderson, Jeremy) (Entered: 10/26/2022)
11/01/2022	38	SCHEDULING ORDER: Fact Discovery completed by 9/1/2023. Status Report due by 5/1/2023. Dispositive Motions due by 12/11/2023. Joint Claim Construction Brief due by 4/17/2023. A Markman Hearing is set for 5/31/2023 at 10:00 AM in Courtroom 6B before Judge Gregory B. Williams. A Final Pretrial Conference is set for 4/5/2024 at 10:00 AM in Courtroom 6B before Judge Gregory B. Williams. A 5-day Jury Trial is set for 4/15/2024 at 09:30 AM in Courtroom 6B before Judge Gregory B. Williams. Signed by Judge Gregory B. Williams on 11/1/22. (ntl) (Entered: 11/01/2022)
11/02/2022	39	REQUEST for Oral Argument by Down App, Inc. re 25 MOTION to Dismiss for Failure to State a Claim . (Anderson, Jeremy) (Entered: 11/02/2022)
11/04/2022	40	ORAL ORDER: IT IS HEREBY ORDERED that the Court will hear oral argument on Defendants' Motion to Dismiss, No. 22-478, D.I. 24; No. 22-479, D.I. 25; No. 22-281, D.I 27; No. 22-482, D.I. 25, on December 14, 2022 beginning at 10:00 a.m. in Courtroom 6B. Each side will be allocated up to thirty (30) minutes to present its argument. ORDERED by Judge Gregory B. Williams on 11/4/2022. Associated Cases: 1:22-cv-00478-GBW, 1:22-cv-00479-GBW, 1:22-cv-00481-GBW, 1:22-cv-00482-GBW (etg) (Entered: 11/04/2022)
11/08/2022	41	Letter to The Honorable Gregory B. Williams from Jimmy Chong regarding being excused from the December 14, 2022 Hearing - re (39 in 1:22-cv-00478-GBW, 39 in 1:22-cv-00478-GBW, 40 in 1:22-cv-00482-GBW, 40 in 1:22-cv-00482-GBW, 40 in 1:22-cv-00479-GBW, 40 in 1:22-cv-00479-GBW, 42 in 1:22-cv-00481-GBW, 42 in 1:22-cv-00481-GBW) Order,, Set Hearings,. (Chong, Jimmy) (Entered: 11/08/2022)
11/17/2022	42	ORAL ORDER: For purposes of analyzing the motion to dismiss based on invalidity pursuant to 35 U.S.C. § 101, IT IS HEREBY ORDERED that, no later than November 30, 2022, each side shall file a one (1) page letter identifying which U.S. Supreme Court or

		Federal Circuit case(s) it contends is most similar to the patent(s)-at issue. ORDERED by Judge Gregory B. Williams on 11/17/22. Associated Cases: 1:22-cv-00478-GBW et al. (ntl) (Entered: 11/17/2022)
11/30/2022	43	Letter to The Honorable Gregory B. Williams from Jimmy Chong and William P. Ramey III regarding In response to Court's November 17, 2022 Order - re (41 in 1:22-cv-00478-GBW, 34 in 1:22-cv-00484-GBW, 44 in 1:22-cv-00481-GBW, 44 in 1:22-cv-00480-GBW, 42 in 1:22-cv-00479-GBW, 42 in 1:22-cv-00482-GBW) Order,. (Attachments: # 1 Exhibit) (Chong, Jimmy) (Entered: 11/30/2022)
11/30/2022	44	Letter to The Honorable Gregory B. Williams from Jeremy D. Anderson regarding Letter Brief Requested by Court in November 17, 2022 Oral Order. (Anderson, Jeremy) (Entered: 11/30/2022)
12/14/2022		Minute Entry for proceedings held before Judge Gregory B. Williams - Oral Argument held on 12/14/2022. (Court Reporter: Deanna Warner) Associated Cases: 1:22-cv-00478-GBW et al. (ntl) (Entered: 12/14/2022)
01/26/2023	45	Letter to The Honorable Gregory B. Williams from Jeffrey J. Lyons regarding Request for Guidance on Anticipated Motions to Stay by All Defendants. (Lyons, Jeffrey) (Entered: 01/26/2023)
01/30/2023	46	NOTICE OF SERVICE of Defendants' Initial Claim Terms and Proposed Construction filed by Hily Corp., Coffee Meets Bagel, Inc., Grindr, Inc., Down App, Inc..(Anderson, Jeremy) (Entered: 01/30/2023)
02/06/2023	47	MEMORANDUM ORDER: IT IS HEREBY ORDERED that Defendants' Motion to Dismiss (No. 22-478, D.I. 24; No. 22-479, D.I. 25; No. 22- 481, D.I. 27; No. 22-482, D.I. 25) is GRANTED. Signed by Judge Gregory B. Williams on 2/6/23. Associated Cases: 1:22-cv-00478-GBW, 1:22-cv-00479-GBW, 1:22-cv-00481-GBW, 1:22-cv-00482-GBW (ntl) (Entered: 02/06/2023)
02/06/2023		CASE CLOSED (ntl) (Entered: 02/06/2023)
02/07/2023	48	Report to the Commissioner of Patents and Trademarks (Attachments: # 1 order)(ntl) (Entered: 02/07/2023)
03/06/2023	49	NOTICE OF APPEAL to the Federal Circuit of 47 Memorandum and Order, . Appeal filed by Wireless Discovery LLC. (Chong, Jimmy) (Entered: 03/06/2023)
03/06/2023		APPEAL - Credit Card Payment of $505.00 received re 49 Notice of Appeal (Federal Circuit) filed by Wireless Discovery LLC. (Filing fee $505, receipt number ADEDC-4082225.) (Chong, Jimmy) (Entered: 03/06/2023)
03/06/2023		Notice of Appeal and Docket Sheet to US Court of Appeals for the Federal Circuit re 49 Notice of Appeal (Federal Circuit). (smg) (Entered: 03/06/2023)
03/15/2023	50	NOTICE of Docketing Record on Appeal from USCA for the Federal Circuit re 49 Notice of Appeal (Federal Circuit) filed by Wireless Discovery LLC. USCA Case Number 2023-1584. (ntl) (Entered: 03/16/2023)

PACER Service Center			
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05/09/2023 12:45:43			
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Description:	Docket Report	**Search Criteria:**	1:22-cv-00479-GBW Start date: 1/1/1975 End date: 5/9/2023
Billable Pages:	8	**Cost:**	0.80

CLOSED,APPEAL,PATENT

U.S. District Court
District of Delaware (Wilmington)
CIVIL DOCKET FOR CASE #: 1:22-cv-00480-GBW

Wireless Discovery LLC v. Eharmony, Inc.
Assigned to: Judge Gregory B. Williams
Related Cases: 1:22-cv-00478-GBW
1:22-cv-00479-GBW
1:22-cv-00481-GBW
1:22-cv-00482-GBW
1:22-cv-00483-VAC
1:22-cv-00484-GBW
1:22-cv-00485-VAC-SRF
Case in other court: 23-01586
Cause: 35:271 Patent Infringement

Date Filed: 04/13/2022
Date Terminated: 02/06/2023
Jury Demand: Plaintiff
Nature of Suit: 830 Patent
Jurisdiction: Federal Question

Plaintiff

Wireless Discovery LLC

represented by **Jimmy C. Chong**
Chong Law Firm, PA
2961 Centerville Rd., Ste 350
Wilmington, DE 19808
302-999-9480
Fax: 302-800-1999
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LEAD ATTORNEY
ATTORNEY TO BE NOTICED

William P. Ramey , III
Email: wramey@rameyfirm.com
PRO HAC VICE
ATTORNEY TO BE NOTICED

V.

Defendant

Eharmony, Inc.

represented by **Jeffrey J. Lyons**
Baker & Hostetler
1201 North Market Street
Wilmington, DE 19801
(302) 468-7088
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Email: kflynn@bakerlaw.com
PRO HAC VICE
ATTORNEY TO BE NOTICED

Counter Claimant

Eharmony, Inc. represented by **Jeffrey J. Lyons**
(See above for address)
LEAD ATTORNEY
ATTORNEY TO BE NOTICED

Andrew E. Samuels
(See above for address)
ATTORNEY TO BE NOTICED

Douglas A. Grady
(See above for address)
ATTORNEY TO BE NOTICED

Kevin P. Flynn
(See above for address)
ATTORNEY TO BE NOTICED

V.

Counter Defendant

Wireless Discovery LLC represented by **Jimmy C. Chong**
(See above for address)
LEAD ATTORNEY
ATTORNEY TO BE NOTICED

Counter Claimant

Eharmony, Inc. represented by **Jeffrey J. Lyons**
(See above for address)
LEAD ATTORNEY
ATTORNEY TO BE NOTICED

Andrew E. Samuels
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Douglas A. Grady
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ATTORNEY TO BE NOTICED

Kevin P. Flynn
(See above for address)
ATTORNEY TO BE NOTICED

V.

Counter Defendant

Wireless Discovery LLC represented by **Jimmy C. Chong**
(See above for address)
LEAD ATTORNEY
ATTORNEY TO BE NOTICED

William P. Ramey , III
(See above for address)
ATTORNEY TO BE NOTICED

Date Filed	#	Docket Text
04/13/2022	1	COMPLAINT filed with Jury Demand against Eharmony, Inc. - Magistrate Consent Notice to Pltf. (Filing fee $ 402, receipt number ADEDC-3850986.) - filed by Wireless Discovery LLC. (Attachments: # 1 Exhibit A, # 2 Exhibit B, # 3 Related Cases, # 4 Civil Cover Sheet)(twk) (Entered: 04/14/2022)
04/13/2022	2	Notice, Consent and Referral forms re: U.S. Magistrate Judge jurisdiction. (twk) (Entered: 04/14/2022)
04/13/2022	3	Report to the Commissioner of Patents and Trademarks for Patent/Trademark Number(s) US 9,264,875. (twk) (Entered: 04/14/2022)
04/13/2022	4	Disclosure Statement pursuant to Rule 7.1: No Parents or Affiliates Listed filed by Wireless Discovery LLC. (twk) (Entered: 04/14/2022)
04/13/2022	5	Summonses Issued (please complete the top portion of the form and print out for use/service). (twk) (Entered: 04/14/2022)
04/20/2022		Case Assigned to Vacant Judgeship (2022). Please include initials of VAC after the case number on all documents filed. Associated Cases: 1:22-cv-00478-VAC through 1:22-cv-00485-VAC (rjb) (Entered: 04/20/2022)
04/20/2022	6	ORAL ORDER: This case has been assigned to the District of Delaware's Vacant Judgeship ("VAC"). Detailed information relating to VAC cases may be found in the Court's Announcement of March 3, 2022 and Standing Order No. 2022-VAC-1 (March 9, 2022), which are found on the Court's website. Consistent with the foregoing Announcement and Standing Order, IT IS HEREBY ORDERED that the parties shall file the "Notice of Consent or Absence of Consent to Proceed Before a United States Magistrate Judge," being docketed along with the instant order, no later than sixty (60) days after service of the Complaint on the first defendant that is served. IT IS FURTHER ORDERED that the Notice, Consent, and Referral forms re: U.S. Magistrate Judge jurisdiction, previously docketed in this case, are VACATED. Issued by the Clerk of Court on 4/20/2022. Associated Cases: 22cv478-VAC through 22cv485-VAC (ntl) (Entered: 04/20/2022)
04/20/2022	7	VAC Notice, Consent, Non-Consent, Magistrate Referral Associated Cases: 22cv478-VAC through 22cv485-VAC (ntl) (Entered: 04/20/2022)

04/21/2022	8	SUMMONS Returned Executed by Wireless Discovery LLC. Eharmony, Inc. served on 4/19/2022, answer due 5/10/2022. (Chong, Jimmy) (Entered: 04/21/2022)
05/06/2022	9	NOTICE of Appearance by Jeffrey J. Lyons on behalf of Eharmony, Inc. (Lyons, Jeffrey) (Entered: 05/06/2022)
05/06/2022	10	MOTION for Pro Hac Vice Appearance of Attorney Douglas A. Grady, Andrew E. Samuels, Kevin P. Flynn - filed by Eharmony, Inc.. (Lyons, Jeffrey) (Entered: 05/06/2022)
05/06/2022		SO ORDERED, re 10 MOTION for Pro Hac Vice Appearance of Attorney Douglas A. Grady, Andrew E. Samuels, Kevin P. Flynn filed by Eharmony, Inc. ORDERED by Judge Colm F. Connolly on 5/6/22. (ntl) (Entered: 05/06/2022)
05/07/2022	11	STIPULATION TO EXTEND TIME to Respond to the Complaint to June 10, 2022 - filed by Eharmony, Inc.. (Lyons, Jeffrey) (Entered: 05/07/2022)
05/09/2022		SO ORDERED, re 11 STIPULATION TO EXTEND TIME to Respond to the Complaint to June 10, 2022 filed by Eharmony, Inc. -- Reset Answer Deadline: Eharmony, Inc. answer due 6/10/2022. ORDERED by Judge Colm F. Connolly on 5/9/22. (ntl) (Entered: 05/09/2022)
05/24/2022		Pro Hac Vice Attorney Kevin P. Flynn, Andrew E. Samuels, and Douglas A. Grady for Eharmony, Inc. added for electronic noticing. Pursuant to Local Rule 83.5 (d)., Delaware counsel shall be the registered users of CM/ECF and shall be required to file all papers. (mpb) (Entered: 05/24/2022)
06/09/2022	12	MOTION to Dismiss for Failure to State a Claim *and Joinder in The Meet Group, Inc.'s Motion to Dismiss for Failure to State a Claim* - filed by Eharmony, Inc.. (Attachments: # 1 Text of Proposed Order)(Lyons, Jeffrey) (Entered: 06/09/2022)
06/09/2022	13	ANSWER to 1 Complaint, with Jury Demand , COUNTERCLAIM against Wireless Discovery LLC by Eharmony, Inc..(Lyons, Jeffrey) (Entered: 06/09/2022)
06/09/2022	14	Disclosure Statement pursuant to Rule 7.1: identifying Corporate Parent Parship Meet US Holding, Inc., Corporate Parent Parship Group GmbH, Corporate Parent THMMS Holding GmbH, Corporate Parent 7Love Holding GmbH, Corporate Parent ParshipMeet Holding GmbH, Corporate Parent ProSiebenSat.1 Media SE, Corporate Parent General Atlantic PD GmbH, Corporate Parent General Atlantic PD B.V., Corporate Parent Mediaset Espaa Comunicacin, SA, Corporate Parent General Atlantic Coperatief U.A. for Eharmony, Inc. filed by Eharmony, Inc.. (Lyons, Jeffrey) (Entered: 06/09/2022)
06/21/2022	15	VAC Magistrate Non-Consent completed by the parties filed by Eharmony, Inc.. (Lyons, Jeffrey) (Entered: 06/21/2022)
06/21/2022	16	ORAL ORDER: The parties having filed the appropriate form advising the Court that they do not unanimously consent to the jurisdiction of a Magistrate Judge, IT IS HEREBY ORDERED that, until further order of the Court, this case will remain assigned to the VAC (2022) docket. IT IS FURTHER ORDERED that this case is referred to Magistrate Judge Sherry R. Fallon solely for the following purposes: (1) to adjudicate discovery (including fact and expert discovery) and protective order disputes; (2) to issue or modify a scheduling order; (3) to review stipulated orders and pro hac vice motions; and (4) to review requests for mediation in cases other than patent and securities cases. Issued by the Clerk of Court on 6/21/22. Associated Cases: 1:22-cv-00478-VAC, 1:22-cv-00480-VAC, 1:22-cv-00484-VAC (ntl) (Entered: 06/21/2022)
06/22/2022		ORAL ORDER RE: (D.I. 10 in 22-cv-478-VAC-SRF); (D.I. 15 in 22-cv-480-VAC-SRF) and (D.I. 16 in 22-cv-484-VAC-SRF): Pursuant to Paragraphs 5(b)-(c) of the Court's Standing Order No. 2022-VAC-1, IT IS HEREBY ORDERED THAT: (1) On or before

		June 29, 2022, the parties shall: (a) hold a Rule 26(f) conference; and (b) commence discovery. (2) The parties shall file a proposed scheduling order within 30 days of the Rule 26(f) conference and inform the Court as to whether the need for coordinated discovery is anticipated. The Court's form scheduling order is posted at www.ded.uscourts.gov/judge/magistrate-judge-sherry-r-fallon. If the parties have any suggestions or modifications to the standard form of scheduling order, they may be included in the proposed order for consideration by the Court. If any disputed issue exists regarding the proposed scheduling order, it shall be noted therein, along with the parties' proposed language on the issue for consideration by the Court; (3) A scheduling teleconference pursuant to Fed. R. Civ. P. 16(b) is set for **9/7/2022 at 11:00 a.m.** Ordered by Judge Sherry R. Fallon on 6/22/2022. Associated Cases: 1:22-cv-00478-VAC-SRF, 1:22-cv-00480-VAC-SRF, 1:22-cv-00484-VAC-SRF(lih) (Entered: 06/22/2022)
06/22/2022		ORAL ORDER re D.I. 12 Motion: In accordance with the Court's June 21, 2022 Oral Order and paragraph 5(g) of Standing Order No. 2022-VAC-1, the pending motion to dismiss (D.I. 12) does not fall within the scope of the referral to the undersigned judicial officer. Therefore, the motion will be addressed following the assignment of an Article III Judge. Pursuant to paragraph 5(f) of Standing Order No. 2022-VAC-1, the pending motion shall not be grounds to prevent the case from progressing and briefing shall be completed in accordance with the Local Rules. Ordered by Judge Sherry R. Fallon on 6/22/2022. (lih) (Entered: 06/22/2022)
06/23/2022		CORRECTING ENTRY: The motion previously filed as D.I. 17 has been deleted due to document being filed using the wrong event code. Counsel is advised to refile the motion using the appropriate event code. (lih) (Entered: 06/23/2022)
06/23/2022	17	MOTION for Extension of Time to Respond to Defendant's Motion to Dismiss to 07/07/2022 - filed by Wireless Discovery LLC. (Chong, Jimmy) Modified on 6/23/2022 (lih). (Entered: 06/23/2022)
06/23/2022		ORAL ORDER- GRANTING 17 Unopposed MOTION for Extension of Time to Respond to Defendant's Motion to Dismiss to 07/07/2022. Set Briefing Schedule: (Answering Brief due 7/7/2022.) Signed by Judge Sherry R. Fallon on 6/23/2022. (lih) (Entered: 06/23/2022)
06/30/2022	18	ANSWER to 13 Answer to Complaint, Counterclaim by Wireless Discovery LLC.(Chong, Jimmy) (Entered: 06/30/2022)
07/07/2022	19	ANSWERING BRIEF in Opposition re 12 MOTION to Dismiss for Failure to State a Claim filed by Wireless Discovery LLC.Reply Brief due date per Local Rules is 7/14/2022. (Chong, Jimmy) Modified on 7/7/2022 (lih). (Entered: 07/07/2022)
07/14/2022	20	STIPULATION TO EXTEND TIME to File Reply Brief in Support of Motion to Dismiss to July 28, 2022 - filed by Eharmony, Inc.. (Lyons, Jeffrey) (Entered: 07/14/2022)
07/14/2022		SO ORDERED- re 20 STIPULATION TO EXTEND TIME to File Reply Brief. Set Briefing Schedule: re 12 MOTION to Dismiss for Failure to State a Claim. (Reply Brief due 7/28/2022.) Signed by Judge Sherry R. Fallon on 7/14/2022. (lih) (Entered: 07/14/2022)
07/18/2022	21	AMENDED COMPLAINT for Patent Infringement against Eharmony, Inc.- filed by Wireless Discovery LLC. (Attachments: # 1 Exhibit, # 2 Exhibit, # 3 Exhibit, # 4 Exhibit, # 5 Exhibit, # 6 Exhibit)(Chong, Jimmy) Modified on 7/19/2022 (lih). (Entered: 07/18/2022)
07/19/2022	22	MOTION for Pro Hac Vice Appearance of Attorney William P Ramey, III - filed by Wireless Discovery LLC. (Chong, Jimmy) (Entered: 07/19/2022)

07/20/2022		SO ORDERED- re 22 MOTION for Pro Hac Vice Appearance of Attorney William P Ramey, III. Signed by Judge Sherry R. Fallon on 7/20/2022. (lih) (Entered: 07/20/2022)
07/21/2022		Pro Hac Vice Attorney William P. Ramey, III for Wireless Discovery LLC added for electronic noticing. Pursuant to Local Rule 83.5 (d)., Delaware counsel shall be the registered users of CM/ECF and shall be required to file all papers. (mpb) (Entered: 07/21/2022)
07/26/2022	23	REPLY BRIEF re 12 MOTION to Dismiss for Failure to State a Claim and Joinder in The Meet Group, Inc.'s Motion to Dismiss for Failure to State a Claim filed by Eharmony, Inc.. (Lyons, Jeffrey) Modified on 7/27/2022 (lih). (Entered: 07/26/2022)
07/28/2022	24	STIPULATION TO EXTEND TIME to Answer, Move, or Otherwise Respond to the Amended Complaint to August 31, 2022 - filed by Eharmony, Inc.. (Lyons, Jeffrey) (Entered: 07/28/2022)
07/28/2022		ORAL ORDER re D.I. 24 Stipulation to Extend Time: The parties' stipulation to extend time is DENIED without prejudice. Defendant's motion to dismiss (D.I. 12) is fully briefed. After the completion of briefing on the motion to dismiss, Plaintiff filed an amended complaint. (D.I. 21) The proposed stipulation seeks an extension of time for Defendant to file another responsive pleading without addressing the status of the pending motion to dismiss. On or before July 29, 2022, the parties shall file an amended stipulation to extend time which addresses the status of the pending motion to dismiss and confirms whether Defendant consents to the filing of the Amended Complaint in accordance with Fed. R. Civ. P. 15(a)(2). Ordered by Judge Sherry R. Fallon on 7/28/2022. (lih) (Entered: 07/28/2022)
07/28/2022	25	PROPOSED Scheduling Order by Eharmony, Inc.. (Lyons, Jeffrey) Modified on 7/29/2022 (lih). (Entered: 07/28/2022)
07/29/2022	26	Amended STIPULATION TO EXTEND TIME to Answer, Move, or Otherwise Respond to the Amended Complaint to August 31, 2022 - filed by Eharmony, Inc.. (Lyons, Jeffrey) (Entered: 07/29/2022)
07/29/2022		SO ORDERED- re 26 Amended STIPULATION TO EXTEND TIME to Answer, Move, or Otherwise Respond to the Amended Complaint to August 31, 2022. Reset Answer Deadlines: Eharmony, Inc. answer due 8/31/2022. Signed by Judge Sherry R. Fallon on 7/29/2022. (lih) (Entered: 07/29/2022)
08/25/2022	27	MOTION for Jimmy Chong to Withdraw as Attorney - filed by Wireless Discovery LLC. (Chong, Jimmy) (Entered: 08/25/2022)
08/31/2022	28	STIPULATION TO EXTEND TIME to Answer, Move, or Otherwise Respond to the Amended Complaint to September 7, 2022 - filed by Eharmony, Inc.. (Lyons, Jeffrey) (Entered: 08/31/2022)
08/31/2022		SO ORDERED, re 28 STIPULATION TO EXTEND TIME to Answer, Move, or Otherwise Respond to the Amended Complaint to September 7, 2022 filed by Eharmony, Inc.. Signed by Judge Sherry R. Fallon on 8/31/2022. (Polito, Rebecca) (Entered: 08/31/2022)
08/31/2022		Reset Answer Deadlines: Eharmony, Inc. answer due 9/7/2022. (lih) (Entered: 09/07/2022)
09/06/2022	29	SCHEDULING ORDER: Joinder of Parties due by 9/1/2022. Amended Pleadings due by 9/1/2022. Discovery due by 9/15/2023. Opening Expert Reports due by 9/29/2023. Rebuttal Expert Reports due by 11/10/2023. Expert Discovery due by 1/31/2024. Status Report due by 5/10/2023. Dispositive Motions due by 3/1/2024. Claim Construction Opening Brief due by 2/20/2023. Claim Construction Answering Brief due by 3/20/2023.

		Claim Construction Reply Brief due by 4/3/2023. Claim Construction Surreply Brief due by 4/17/2023. Joint Claim Construction Brief due by 5/10/2023. IT IS FURTHER ORDERED that the Rule 16 scheduling teleconference set for September 7, 2022 is CANCELLED. Signed by Judge Sherry R. Fallon on 9/6/2022. (Polito, Rebecca) (Entered: 09/06/2022)
09/07/2022	30	MOTION to Dismiss for Failure to State a Claim - filed by Eharmony, Inc.. (Attachments: # 1 Text of Proposed Order)(Lyons, Jeffrey) (Entered: 09/07/2022)
09/07/2022	31	OPENING BRIEF in Support re 30 MOTION to Dismiss for Failure to State a Claim filed by Eharmony, Inc..Answering Brief/Response due date per Local Rules is 9/21/2022. (Attachments: # 1 Exhibit)(Lyons, Jeffrey) (Entered: 09/07/2022)
09/07/2022	32	ANSWER to 21 Amended Complaint with Jury Demand , Affirmative Defenses, and, COUNTERCLAIM against Wireless Discovery LLC by Eharmony, Inc..(Lyons, Jeffrey) Modified on 9/8/2022 (lih). (Entered: 09/07/2022)
09/08/2022		Case Reassigned to Judge Gregory B. Williams. Please include the initials of the Judge (GBW) after the case number on all documents filed. (smg) (Entered: 09/08/2022)
09/15/2022	33	STIPULATION TO EXTEND TIME for the Parties to Submit a Proposed Protective Order to September 30, 2022 - filed by Eharmony, Inc.. (Lyons, Jeffrey) (Entered: 09/15/2022)
09/15/2022	34	STIPULATION TO EXTEND TIME for Plaintiff to Respond to Defendant's Motion to Dismiss to 10/12/2022 - filed by Wireless Discovery LLC. (Attachments: # 1 Text of Proposed Order)(Chong, Jimmy) (Entered: 09/15/2022)
09/20/2022		SO ORDERED, re 33 STIPULATION TO EXTEND TIME for the Parties to Submit a Proposed Protective Order to September 30, 2022 filed by Eharmony, Inc., 34 STIPULATION TO EXTEND TIME for Plaintiff to Respond to Defendant's Motion to Dismiss to 10/12/2022 filed by Wireless Discovery LLC. Signed by Judge Gregory B. Williams on 9/19/22. (ntl) (Entered: 09/20/2022)
09/21/2022	35	NOTICE OF SERVICE of Initial Disclosures filed by Eharmony, Inc..(Lyons, Jeffrey) (Entered: 09/21/2022)
09/26/2022		ORAL ORDER: IT IS HEREBY ORDERED that this matter is no longer referred to Magistrate Judge Fallon. ORDERED by Judge Gregory B. Williams on 9/26/22. Associated Cases: 1:22-cv-00478-GBW-SRF et al. (ntl) (Entered: 09/26/2022)
09/27/2022	36	ANSWER to 32 Answer to Amended Complaint, Counterclaim by Wireless Discovery LLC.(Chong, Jimmy) (Entered: 09/27/2022)
10/05/2022	37	PROPOSED ORDER Proposed Protective Order by Wireless Discovery LLC. (Chong, Jimmy) (Entered: 10/05/2022)
10/06/2022		SO ORDERED, re 37 Stipulated Protective Order. Signed by Judge Gregory B. Williams on 10/6/22. (ntl) (Entered: 10/06/2022)
10/07/2022	38	NOTICE OF SERVICE of Paragraph 3 Disclosures filed by Eharmony, Inc..(Lyons, Jeffrey) (Entered: 10/07/2022)
10/12/2022	39	ANSWERING BRIEF in Opposition re 30 MOTION to Dismiss for Failure to State a Claim filed by Wireless Discovery LLC.Reply Brief due date per Local Rules is 10/19/2022. (Chong, Jimmy) (Entered: 10/12/2022)
10/19/2022	40	REPLY BRIEF re 30 MOTION to Dismiss for Failure to State a Claim filed by Eharmony, Inc.. (Attachments: # 1 Exhibit A)(Lyons, Jeffrey) (Entered: 10/19/2022)

11/04/2022	41	Letter to The Honorable Gregory B. Williams from Jeffrey J. Lyons regarding Oral Argument in Related Cases - re 30 MOTION to Dismiss for Failure to State a Claim . (Lyons, Jeffrey) (Entered: 11/04/2022)
11/04/2022	42	STIPULATION TO EXTEND TIME to Produce Core Technical Documents to November 25, 2022 - filed by Eharmony, Inc.. (Lyons, Jeffrey) (Entered: 11/04/2022)
11/07/2022		SO ORDERED, re 42 STIPULATION TO EXTEND TIME to Produce Core Technical Documents to November 25, 2022 filed by Eharmony, Inc. Signed by Judge Gregory B. Williams on 11/7/2022. (etg) (Entered: 11/08/2022)
11/09/2022	43	ORAL ORDER: IT IS HEREBY ORDERED that, not later than fourteen (14) days from the date of this Order, the parties shall file a joint amended proposed Scheduling Order in this action consistent with the applicable form Scheduling Order of Judge Williams, which is posted at http://www/ded/uscourts.gov (See Chambers, Judge Williams, Forms). For purposes of efficiency and convenience for the Court, the parties shall adopt the dates in the Scheduling Orders in related cases Nos. 22-478, 22-479, 22-481, and 22-482. If the parties propose dates that deviate from the Scheduling Orders in the related cases, the parties shall file a letter directing the Court to the paragraph numbers in the joint amended proposed Scheduling Order that deviate from the Scheduling Orders in the related cases and provide their reasons for such deviation. Having reviewed the parties' letters (No. 22-480, D.I. 41; No. 22-484, D.I. 31), IT IS ALSO HEREBY ORDERED that Defendants eHarmony, Inc.'s and The Meet Group, Inc.'s request to present argument in support of their respective motions to dismiss (No. 22-480; D.I. 30; No. 22-484, D.I. 12) at the December 14, 2022 hearing in related cases Nos. 22-478, 22-479, 22-481, and 22-482 is GRANTED. ORDERED by Judge Gregory B. Williams on 11/9/22. Associated Cases: 1:22-cv-00480-GBW, 1:22-cv-00484-GBW (ntl) (Entered: 11/09/2022)
11/17/2022	44	ORAL ORDER: For purposes of analyzing the motion to dismiss based on invalidity pursuant to 35 U.S.C. § 101, IT IS HEREBY ORDERED that, no later than November 30, 2022, each side shall file a one (1) page letter identifying which U.S. Supreme Court or Federal Circuit case(s) it contends is most similar to the patent(s)-at issue. ORDERED by Judge Gregory B. Williams on 11/17/22. Associated Cases: 1:22-cv-00478-GBW et al. (ntl) (Entered: 11/17/2022)
11/22/2022	45	Joint Letter to The Honorable Gregory B. Williams from Jeffrey J. Lyons regarding Submission of Proposed Schedule - re 43 Order,,,,,, Set Hearings,,,,,. (Lyons, Jeffrey) (Entered: 11/22/2022)
11/22/2022	46	Joint PROPOSED ORDER Scheduling Order by Eharmony, Inc.. (Lyons, Jeffrey) (Entered: 11/22/2022)
11/28/2022	47	SCHEDULING ORDER: Fact Discovery completed by 9/1/2023. Status Report due by 5/1/2023. Dispositive Motions due by 12/11/2023. Joint Claim Construction Brief due by 4/17/2023. A Markman Hearing is set for 5/31/2023 at 10:00 AM in Courtroom 6B before Judge Gregory B. Williams. A Final Pretrial Conference is set for 4/5/2024 at 10:00 AM in Courtroom 6B before Judge Gregory B. Williams. A 5-day Jury Trial is set for 4/15/2024 at 09:30 AM in Courtroom 6B before Judge Gregory B. Williams. Signed by Judge Gregory B. Williams on 11/28/2022. (etg) (Entered: 11/28/2022)
11/30/2022	48	Letter to The Honorable Gregory B. Williams from Jimmy Chong and William P. Ramey III regarding In response to Court's November 17, 2022 Order - re (41 in 1:22-cv-00478-GBW, 34 in 1:22-cv-00484-GBW, 44 in 1:22-cv-00481-GBW, 44 in 1:22-cv-00480-GBW, 42 in 1:22-cv-00479-GBW, 42 in 1:22-cv-00482-GBW) Order,. (Attachments: # 1 Exhibit) (Chong, Jimmy) (Entered: 11/30/2022)

11/30/2022	49	Letter to The Honorable Gregory B. Williams from Jeffrey J. Lyons regarding Response to the Court's November 17, 2022 Oral Orders - re (34 in 1:22-cv-00484-GBW, 44 in 1:22-cv-00480-GBW) Order,. (Lyons, Jeffrey) (Entered: 11/30/2022)
12/02/2022	50	NOTICE OF SERVICE of Core Technical Documents and Sales Figures re 47 Scheduling Order,, filed by Eharmony, Inc..(Lyons, Jeffrey) (Entered: 12/02/2022)
12/14/2022		Minute Entry for proceedings held before Judge Gregory B. Williams - Oral Argument held on 12/14/2022. (Court Reporter: Deanna Warner) Associated Cases: 1:22-cv-00478-GBW et al. (ntl) (Entered: 12/14/2022)
01/26/2023	51	Letter to The Honorable Gregory B. Williams from Jeffrey J. Lyons regarding Request for Guidance on Anticipated Motions to Stay by All Defendants. (Lyons, Jeffrey) (Entered: 01/26/2023)
01/30/2023	52	NOTICE OF SERVICE of Initial Invalidity Contentions filed by Eharmony, Inc..(Lyons, Jeffrey) (Entered: 01/30/2023)
01/30/2023	53	NOTICE OF SERVICE of Initial Claim Terms and Proposed Constructions filed by Eharmony, Inc..(Lyons, Jeffrey) (Entered: 01/30/2023)
02/06/2023	54	MEMORANDUM ORDER: The Court GRANTS-IN-PART and DENIES-IN-PART eHarmony's Motion to Dismiss, No. 22-480, D.I. 30, and GRANTS The Meet Group's Motion to Dismiss, No. 22-484, D.I. 12. Signed by Judge Gregory B. Williams on 2/6/23. Associated Cases: 1:22-cv-00480-GBW, 1:22-cv-00484-GBW (ntl) (Entered: 02/06/2023)
02/06/2023		CASE CLOSED (ntl) (Entered: 02/06/2023)
02/07/2023	55	Report to the Commissioner of Patents and Trademarks (Attachments: # 1 order)(ntl) (Entered: 02/07/2023)
02/21/2023	56	MOTION for Attorney Fees - filed by Eharmony, Inc., The Meet Group, Inc.. (Attachments: # 1 Text of Proposed Order)(Lyons, Jeffrey) (Entered: 02/21/2023)
02/21/2023	57	[SEALED] OPENING BRIEF in Support re 56 MOTION for Attorney Fees filed by Eharmony, Inc..Answering Brief/Response due date per Local Rules is 3/7/2023. (Attachments: # 1 Exhibit A)(Lyons, Jeffrey) (Additional attachment(s) added on 2/22/2023: # 2 Certificate of Service) (ntl). (Entered: 02/21/2023)
02/27/2023	58	MOTION for Extension of Time to File Response/Reply as to 56 MOTION for Attorney Fees - filed by Wireless Discovery LLC. (Attachments: # 1 Text of Proposed Order) (Chong, Jimmy) (Entered: 02/27/2023)
03/06/2023	59	NOTICE OF APPEAL to the Federal Circuit of 54 Memorandum and Order, . Appeal filed by Wireless Discovery LLC. (Chong, Jimmy) (Entered: 03/06/2023)
03/06/2023		APPEAL - Credit Card Payment of $505.00 received re 59 Notice of Appeal (Federal Circuit) filed by Wireless Discovery LLC. (Filing fee $505, receipt number ADEDC-4082205.) (Chong, Jimmy) (Entered: 03/06/2023)
03/06/2023		Notice of Appeal and Docket Sheet to US Court of Appeals for the Federal Circuit re 59 Notice of Appeal (Federal Circuit). (jfm) (Entered: 03/06/2023)
03/06/2023	60	ORDER re 58 MOTION for Extension of Time to File Response to 56 MOTION for Attorney Fees filed by Wireless Discovery LLC. Signed by Judge Gregory B. Williams on 3/3/23. (ntl) (Entered: 03/06/2023)
03/16/2023	61	NOTICE of Docketing Record on Appeal from USCA for the Federal Circuit re 59 Notice of Appeal (Federal Circuit) filed by Wireless Discovery LLC. USCA Case Number 2023-1586. (ntl) (Entered: 03/16/2023)

03/21/2023	62	ANSWERING BRIEF in Opposition re 56 MOTION for Attorney Fees filed by Wireless Discovery LLC.Reply Brief due date per Local Rules is 3/28/2023. (Attachments: # 1 Text of Proposed Order)(Chong, Jimmy) (Entered: 03/21/2023)
03/28/2023	63	STIPULATION TO EXTEND TIME to File Reply Brief in Support of Motion for Attorneys' Fees to April 3, 2023 - filed by Eharmony, Inc.. (Lyons, Jeffrey) (Entered: 03/28/2023)
03/29/2023		SO ORDERED, re 63 STIPULATION TO EXTEND TIME to File Reply Brief in Support of Motion for Attorneys' Fees to April 3, 2023 filed by Eharmony, Inc. Signed by Judge Gregory B. Williams on 3/29/23. (ntl) (Entered: 03/29/2023)
04/03/2023	64	REPLY BRIEF re 56 MOTION for Attorney Fees filed by Eharmony, Inc.. (Attachments: # 1 Exhibit A, # 2 Exhibit B)(Lyons, Jeffrey) (Entered: 04/03/2023)
04/05/2023	65	REQUEST for Oral Argument by Eharmony, Inc., The Meet Group, Inc. re (56 in 1:22-cv-00480-GBW, 46 in 1:22-cv-00484-GBW) MOTION for Attorney Fees . (Lyons, Jeffrey) (Entered: 04/05/2023)
04/07/2023	66	REDACTED VERSION of (57 in 1:22-cv-00480-GBW) Opening Brief in Support, (47 in 1:22-cv-00484-GBW) Opening Brief in Support, by Eharmony, Inc., The Meet Group, Inc.. (Lyons, Jeffrey) (Entered: 04/07/2023)

PACER Service Center

Transaction Receipt

05/09/2023 12:43:00

PACER Login:	achachkes3748	**Client Code:**	
Description:	Docket Report	**Search Criteria:**	1:22-cv-00480-GBW Start date: 1/1/1975 End date: 5/9/2023
Billable Pages:	9	**Cost:**	0.90

CLOSED,APPEAL,PATENT

U.S. District Court
District of Delaware (Wilmington)
CIVIL DOCKET FOR CASE #: 1:22-cv-00481-GBW

Wireless Discovery LLC v. Grindr, Inc.
Assigned to: Judge Gregory B. Williams
Related Cases: 1:22-cv-00478-GBW
1:22-cv-00480-GBW
1:22-cv-00479-GBW
1:22-cv-00482-GBW
1:22-cv-00483-VAC
1:22-cv-00484-GBW
1:22-cv-00485-VAC-SRF
Case in other court: 23-01591
Cause: 35:271 Patent Infringement

Date Filed: 04/13/2022
Date Terminated: 02/06/2023
Jury Demand: Plaintiff
Nature of Suit: 830 Patent
Jurisdiction: Federal Question

Plaintiff

Wireless Discovery LLC

represented by **Jimmy C. Chong**
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Wilmington, DE 19808
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LEAD ATTORNEY
ATTORNEY TO BE NOTICED

William P. Ramey , III
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PRO HAC VICE
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V.

Defendant

Grindr, Inc.

represented by **Jeremy Douglas Anderson**
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TERMINATED: 07/07/2022
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PRO HAC VICE
ATTORNEY TO BE NOTICED

Counter Claimant

Grindr, Inc. represented by **Jeremy Douglas Anderson**
(See above for address)
LEAD ATTORNEY
ATTORNEY TO BE NOTICED

Melanie K. Sharp
(See above for address)
TERMINATED: 07/07/2022
ATTORNEY TO BE NOTICED

V.

Counter Defendant

Grindr, Inc. represented by **Jeremy Douglas Anderson**
(See above for address)
LEAD ATTORNEY
ATTORNEY TO BE NOTICED

Melanie K. Sharp
(See above for address)

TERMINATED: 07/07/2022
ATTORNEY TO BE NOTICED

Counter Claimant

Grindr, Inc. represented by **Jeremy Douglas Anderson**
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LEAD ATTORNEY
ATTORNEY TO BE NOTICED

Lance E. Wyatt , Jr.
(See above for address)
PRO HAC VICE
ATTORNEY TO BE NOTICED

Melanie K. Sharp
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TERMINATED: 07/07/2022
ATTORNEY TO BE NOTICED

Neil J. McNabnay
(See above for address)
ATTORNEY TO BE NOTICED

Noel F. Chakkalakal
(See above for address)
ATTORNEY TO BE NOTICED

Philip G. Brown
(See above for address)
ATTORNEY TO BE NOTICED

V.

Counter Defendant

Wireless Discovery LLC represented by **Jimmy C. Chong**
(See above for address)
LEAD ATTORNEY
ATTORNEY TO BE NOTICED

William P. Ramey , III
(See above for address)
ATTORNEY TO BE NOTICED

Date Filed	#	Docket Text
04/13/2022	1	COMPLAINT filed with Jury Demand against Grindr, Inc. - Magistrate Consent Notice to Pltf. (Filing fee $ 402, receipt number ADEDC-3850996.) - filed by Wireless Discovery LLC. (Attachments: # 1 Exhibit A, # 2 Exhibit, # 3 Civil Cover Sheet)(smg) (Entered: 04/14/2022)
04/13/2022	2	Notice, Consent and Referral forms re: U.S. Magistrate Judge jurisdiction. (smg) (Entered: 04/14/2022)

04/13/2022	3	Report to the Commissioner of Patents and Trademarks for Patent/Trademark Number(s) US 9,264,875. (smg) (Entered: 04/14/2022)
04/13/2022	4	Disclosure Statement pursuant to Rule 7.1: No Parents or Affiliates Listed filed by Wireless Discovery LLC. (smg) (Entered: 04/14/2022)
04/14/2022	5	Summonses Issued (please complete the top portion of the form and print out for use/service). (smg) (Entered: 04/14/2022)
04/18/2022	6	SUMMONS Returned Executed by Wireless Discovery LLC. Grindr, Inc. served on 4/18/2022, answer due 5/9/2022. (Chong, Jimmy) (Entered: 04/18/2022)
04/20/2022		Case Assigned to Vacant Judgeship (2022). Please include initials of VAC after the case number on all documents filed. Associated Cases: 1:22-cv-00478-VAC through 1:22-cv-00485-VAC (rjb) (Entered: 04/20/2022)
04/20/2022	7	ORAL ORDER: This case has been assigned to the District of Delaware's Vacant Judgeship ("VAC"). Detailed information relating to VAC cases may be found in the Court's Announcement of March 3, 2022 and Standing Order No. 2022-VAC-1 (March 9, 2022), which are found on the Court's website. Consistent with the foregoing Announcement and Standing Order, IT IS HEREBY ORDERED that the parties shall file the "Notice of Consent or Absence of Consent to Proceed Before a United States Magistrate Judge," being docketed along with the instant order, no later than sixty (60) days after service of the Complaint on the first defendant that is served. IT IS FURTHER ORDERED that the Notice, Consent, and Referral forms re: U.S. Magistrate Judge jurisdiction, previously docketed in this case, are VACATED. Issued by the Clerk of Court on 4/20/2022. Associated Cases: 22cv478-VAC through 22cv485-VAC (ntl) (Entered: 04/20/2022)
04/20/2022	8	VAC Notice, Consent, Non-Consent, Magistrate Referral Associated Cases: 22cv478-VAC through 22cv485-VAC (ntl) (Entered: 04/20/2022)
05/09/2022	9	STIPULATION TO EXTEND TIME to Defendant's to Respond to the Complaint to June 23, 2022 - filed by Grindr, Inc.. (Sharp, Melanie) (Entered: 05/09/2022)
05/10/2022	10	STIPULATION TO EXTEND TIME to Defendant's Respond to the Complaint to June 23, 2022 - filed by Grindr, Inc.. (Sharp, Melanie) (Entered: 05/10/2022)
05/10/2022		SO ORDERED, re 10 STIPULATION TO EXTEND TIME for Defendant's Response to the Complaint to June 23, 2022 filed by Grindr, Inc. -- Reset Answer Deadline: Grindr, Inc. answer due 6/23/2022. Signed by Judge Richard G. Andrews on 5/10/22. (ntl) (Entered: 05/10/2022)
06/22/2022	11	STIPULATION TO EXTEND TIME to ANSWER Complaint to July 5, 2022 - filed by Grindr, Inc.. (Anderson, Jeremy) (Entered: 06/22/2022)
06/22/2022	12	VAC Magistrate Non-Consent completed by the parties filed by Grindr, Inc.. (Anderson, Jeremy) (Entered: 06/22/2022)
06/23/2022	13	ORAL ORDER: The parties having filed the appropriate form advising the Court that they do not unanimously consent to the jurisdiction of a Magistrate Judge, IT IS HEREBY ORDERED that, until further order of the Court, this case will remain assigned to the VAC (2022) docket. IT IS FURTHER ORDERED that this case is referred to Magistrate Judge Sherry R. Fallon solely for the following purposes: (1) to adjudicate discovery (including fact and expert discovery) and protective order disputes; (2) to issue or modify a scheduling order; (3) to review stipulated orders and pro hac vice motions; and (4) to review requests for mediation in cases other than patent and securities cases. Issued by the Clerk of Court on 6/23/2022. (etg) (Entered: 06/23/2022)

06/23/2022		ORAL ORDER RE: 12 : Pursuant to Paragraphs 5(b)-(c) of the Court's Standing Order No. 2022-VAC-1, IT IS HEREBY ORDERED THAT: (1) On or before June 30, 2022, the parties shall: (a) hold a Rule 26(f) conference; and (b) commence discovery. (2) The parties shall file a proposed scheduling order within 30 days of the Rule 26(f) conference and inform the Court as to whether the need for coordinated discovery is anticipated as to related Civil Action No. 22-478-VAC-SRF; 22-480-VAC-SRF and 22-484-VAC-SRF. The Court's form scheduling order is posted at www.ded.uscourts.gov/judge/magistrate-judge-sherry-r-fallon. If the parties have any suggestions or modifications to the standard form of scheduling order, they may be included in the proposed order for consideration by the Court. If any disputed issue exists regarding the proposed scheduling order, it shall be noted therein, along with the parties' proposed language on the issue for consideration by the Court; (3) A scheduling teleconference pursuant to Fed. R. Civ. P. 16(b) is set for **9/7/2022 at 11:00 a.m.** Ordered by Judge Sherry R. Fallon on 6/23/2022. (lih) (Entered: 06/23/2022)
06/23/2022		SO ORDERED- re 11 STIPULATION TO EXTEND TIME to ANSWER Complaint to July 5, 2022. Reset Answer Deadlines: Grindr, Inc. answer due 7/5/2022. Signed by Judge Sherry R. Fallon on 6/23/2022. (lih) (Entered: 06/23/2022)
06/29/2022	14	Joint Motion for Continuance of Rule 26(f) Conference - filed by Grindr, Inc.. (Attachments: # 1 Text of Proposed Order)(Anderson, Jeremy) Modified on 6/30/2022 (lih). (Entered: 06/29/2022)
06/30/2022		ORAL ORDER- GRANTING 14 Joint Motion for Continuance of Rule 26(f) Conference to July 15, 2022. Ordered by Judge Sherry R. Fallon on 6/30/2022. (lih) (Entered: 06/30/2022)
07/05/2022	15	MOTION to Dismiss for Failure to State a Claim - filed by Grindr, Inc.. (Attachments: # 1 Text of Proposed Order)(Anderson, Jeremy) (Entered: 07/05/2022)
07/05/2022	16	OPENING BRIEF in Support re 15 MOTION to Dismiss for Failure to State a Claim filed by Grindr, Inc..Answering Brief/Response due date per Local Rules is 7/19/2022. (Anderson, Jeremy) (Entered: 07/05/2022)
07/05/2022	17	ANSWER to 1 Complaint, with Jury Demand , COUNTERCLAIM against Grindr, Inc. by Grindr, Inc..(Anderson, Jeremy) Modified on 7/6/2022 (lih). (Entered: 07/05/2022)
07/05/2022	18	Disclosure Statement pursuant to Rule 7.1: identifying Corporate Parent Grindr Holdings LLC, Corporate Parent Grindr Capital LLC for Grindr, Inc. filed by Grindr, Inc.. (Anderson, Jeremy) (Entered: 07/05/2022)
07/06/2022		ORAL ORDER re D.I. 15 Motion: In accordance with the Court's June 23, 2022 Oral Order and paragraph 5(g) of Standing Order No. 2022-VAC-1, the pending motion to dismiss (D.I. 15) does not fall within the scope of the referral to the undersigned judicial officer. Therefore, the motion will be addressed following the assignment of an Article III Judge. Pursuant to paragraph 5(f) of Standing Order No. 2022-VAC-1, the pending motion shall not be grounds to prevent the case from progressing and briefing shall be completed in accordance with the Local Rules. Ordered by Judge Sherry R. Fallon on 7/6/2022. (lih) (Entered: 07/06/2022)
07/07/2022	19	NOTICE of Withdrawal of Appearance of Melanie K. Sharp, James L. Higgins and Taylor E. Hallowell by Grindr, Inc. (Sharp, Melanie) (Entered: 07/07/2022)
07/18/2022	20	AMENDED COMPLAINT for Patent Infringement against Grindr, Inc.- filed by Wireless Discovery LLC. (Attachments: # 1 Exhibit, # 2 Exhibit, # 3 Exhibit, # 4 Exhibit, # 5 Exhibit, # 6 Exhibit)(Chong, Jimmy) Modified on 7/19/2022 (lih). (Entered: 07/18/2022)

07/19/2022	21	MOTION for Pro Hac Vice Appearance of Attorney William P Ramey, III - filed by Wireless Discovery LLC. (Chong, Jimmy) (Entered: 07/19/2022)
07/20/2022		SO ORDERED- re 21 MOTION for Pro Hac Vice Appearance of Attorney William P Ramey, III. Signed by Judge Sherry R. Fallon on 7/20/2022. (lih) (Entered: 07/20/2022)
07/20/2022	22	MOTION for Pro Hac Vice Appearance of Attorney Neil J. McNabnay, Lance E. Wyatt, Noel F. Chakkalakal and Philip G. Brown - filed by Grindr, Inc.. (Anderson, Jeremy) (Entered: 07/20/2022)
07/20/2022		SO ORDERED- re 22 MOTION for Pro Hac Vice Appearance of Attorney Neil J. McNabnay, Lance E. Wyatt, Noel F. Chakkalakal and Philip G. Brown. Signed by Judge Sherry R. Fallon on 7/20/2022. (lih) (Entered: 07/20/2022)
07/21/2022		Pro Hac Vice Attorney William P. Ramey, III for Wireless Discovery LLC added for electronic noticing. Pursuant to Local Rule 83.5 (d)., Delaware counsel shall be the registered users of CM/ECF and shall be required to file all papers. (mpb) (Entered: 07/21/2022)
07/25/2022		Pro Hac Vice Attorney Noel F. Chakkalakal, Neil J. McNabnay, Philip G. Brown, and Lance E. Wyatt for Grindr, Inc. added for electronic noticing. Pursuant to Local Rule 83.5 (d)., Delaware counsel shall be the registered users of CM/ECF and shall be required to file all papers. (mpb) (Entered: 07/25/2022)
07/27/2022		CORRECTING ENTRY: The answer previously filed as D.I. 23 has been deleted due to document having the wrong plaintiff/counter-defendant listed in the title of the document. Counsel is advised to file a revised version of the document with the correct case information. (lih) (Entered: 07/27/2022)
07/27/2022	23	ANSWER to 17 Answer to Complaint, Counterclaim by Wireless Discovery LLC.(Chong, Jimmy) (Entered: 07/27/2022)
07/27/2022	24	STIPULATION TO EXTEND TIME to ANSWER First Amended Complaint to August 31, 2022 - filed by Grindr, Inc.. (Anderson, Jeremy) (Entered: 07/27/2022)
07/28/2022		SO ORDERED- re 24 STIPULATION TO EXTEND TIME to ANSWER First Amended Complaint to August 31, 2022. Reset Answer Deadlines: Grindr, Inc. answer due 8/31/2022. Signed by Judge Sherry R. Fallon on 7/28/2022. (lih) (Entered: 07/28/2022)
08/16/2022	25	PROPOSED Scheduling Order by Wireless Discovery LLC. (Chong, Jimmy) Modified on 8/16/2022 (lih). (Entered: 08/16/2022)
08/25/2022	26	MOTION for Jimmy Chong to Withdraw as Attorney - filed by Wireless Discovery LLC. (Chong, Jimmy) (Entered: 08/25/2022)
08/31/2022	27	MOTION to Dismiss for Failure to State a Claim - filed by Grindr, Inc.. (Attachments: # 1 Text of Proposed Order)(Anderson, Jeremy) (Entered: 08/31/2022)
08/31/2022	28	OPENING BRIEF in Support re 27 MOTION to Dismiss for Failure to State a Claim filed by Grindr, Inc..Answering Brief/Response due date per Local Rules is 9/14/2022. (Anderson, Jeremy) (Entered: 08/31/2022)
08/31/2022	29	ANSWER to 20 Amended Complaint with Jury Demand Affirmative Defenses and, COUNTERCLAIM against Wireless Discovery LLC by Grindr, Inc..(Anderson, Jeremy) Modified on 9/7/2022 (lih). (Entered: 08/31/2022)
09/06/2022	30	SCHEDULING ORDER: Joinder of Parties due by 9/1/2022. Amended Pleadings due by 9/1/2022. Discovery due by 9/1/2023. Opening Expert Reports due by 5/1/2023. Rebuttal Expert Reports due by 6/1/2023., Dispositive Motions due by 9/1/2023., Claim

		Construction Opening Brief due by 11/1/2022. Claim Construction Answering Brief due by 12/1/2022. Claim Construction Reply Brief due by 12/15/2022. Claim Construction Surreply Brief due by 1/3/2023. Joint Claim Construction Brief due by 1/10/2023. IT IS FURTHER ORDERED that the Rule 16 status teleconference set for September 7, 2022 is CANCELLED. Signed by Judge Sherry R. Fallon on 9/6/2022. (Polito, Rebecca) (Entered: 09/06/2022)
09/08/2022		Case Reassigned to Judge Gregory B. Williams. Please include the initials of the Judge (GBW) after the case number on all documents filed. (smg) (Entered: 09/08/2022)
09/09/2022	31	STIPULATION TO EXTEND TIME to Respond to Motion to Dismiss and Claim Construction Deadlines to Certain Dates - filed by Grindr, Inc.. (Anderson, Jeremy) (Entered: 09/09/2022)
09/12/2022		SO ORDERED, re 31 STIPULATION TO EXTEND TIME to Respond to Motion to Dismiss and Claim Construction Deadlines to Certain Dates filed by Grindr, Inc. Signed by Judge Gregory B. Williams on 9/12/2022. (etg) (Entered: 09/13/2022)
09/20/2022	32	ANSWER to 29 Answer to Amended Complaint, Counterclaim by Wireless Discovery LLC.(Chong, Jimmy) (Entered: 09/20/2022)
09/26/2022		ORAL ORDER: IT IS HEREBY ORDERED that this matter is no longer referred to Magistrate Judge Fallon. ORDERED by Judge Gregory B. Williams on 9/26/22. Associated Cases: 1:22-cv-00478-GBW-SRF et al. (ntl) (Entered: 09/26/2022)
10/05/2022	33	ANSWERING BRIEF in Opposition re 27 MOTION to Dismiss for Failure to State a Claim filed by Wireless Discovery LLC.Reply Brief due date per Local Rules is 10/12/2022. (Attachments: # 1 Text of Proposed Order, # 2 Exhibit)(Chong, Jimmy) (Entered: 10/05/2022)
10/06/2022	34	PROPOSED ORDER Proposed Protective Order by Wireless Discovery LLC. (Chong, Jimmy) (Entered: 10/06/2022)
10/07/2022		SO ORDERED, re 34 Proposed Protective Order filed by Wireless Discovery LLC. Signed by Judge Gregory B. Williams on 10/7/2022. (etg) (Entered: 10/07/2022)
10/11/2022	35	STIPULATION TO EXTEND TIME to Respond to Motion to Dismiss to October 26, 2022 - filed by Grindr, Inc.. (Anderson, Jeremy) (Entered: 10/11/2022)
10/12/2022		SO ORDERED, re 35 STIPULATION TO EXTEND TIME to Respond to Motion to Dismiss to October 26, 2022 filed by Grindr, Inc. Signed by Judge Gregory B. Williams on 10/12/22. (ntl) (Entered: 10/12/2022)
10/19/2022	36	PROPOSED ORDER [Proposed] Scheduling Order by Grindr, Inc.. (Attachments: # 1 Letter to Hon. Gregory B. Williams Enclosing Proposed Scheduling Order)(Anderson, Jeremy) (Entered: 10/19/2022)
10/21/2022	37	ORAL ORDER: The Court has reviewed the parties' letter of October 19, 2022 and the new proposed scheduling orders. The new proposed scheduling orders do not contain certain language included the Court's form scheduling order which was updated as of October 18, 2022. No later than October 26, 2022, the parties should resubmit their new proposed scheduling orders utilizing the Court's updated form scheduling order as of October 18, 2022. The Court will consider the proposed dates for Pretrial Conferences and Trial in the proposed scheduling orders and adjust those dates if necessary. ORDERED by Judge Gregory B. Williams on 10/21/22. Associated Cases: 1:22-cv-00478-GBW, 1:22-cv-00479-GBW, 1:22-cv-00481-GBW, 1:22-cv-00482-GBW (ntl) (Entered: 10/21/2022)
10/21/2022	38	PROPOSED ORDER [Proposed] Scheduling Order re 36 Proposed Order by Grindr, Inc.. (Anderson, Jeremy) (Entered: 10/21/2022)

10/26/2022	39	REPLY BRIEF re 27 MOTION to Dismiss for Failure to State a Claim filed by Grindr, Inc.. (Anderson, Jeremy) (Entered: 10/26/2022)
11/01/2022	40	SCHEDULING ORDER: Fact Discovery completed by 9/1/2023. Status Report due by 5/1/2023. Dispositive Motions due by 12/11/2023. Joint Claim Construction Brief due by 4/17/2023. A Markman Hearing is set for 5/31/2023 at 10:00 AM in Courtroom 6B before Judge Gregory B. Williams. A Final Pretrial Conference is set for 4/5/2024 at 10:00 AM in Courtroom 6B before Judge Gregory B. Williams. A 5-day Jury Trial is set for 4/15/2024 at 09:30 AM in Courtroom 6B before Judge Gregory B. Williams. Signed by Judge Gregory B. Williams on 11/1/22. (ntl) (Entered: 11/01/2022)
11/02/2022	41	REQUEST for Oral Argument by Grindr, Inc. re 27 MOTION to Dismiss for Failure to State a Claim . (Anderson, Jeremy) (Entered: 11/02/2022)
11/04/2022	42	ORAL ORDER: IT IS HEREBY ORDERED that the Court will hear oral argument on Defendants' Motion to Dismiss, No. 22-478, D.I. 24; No. 22-479, D.I. 25; No. 22-281, D.I 27; No. 22-482, D.I. 25, on December 14, 2022 beginning at 10:00 a.m. in Courtroom 6B. Each side will be allocated up to thirty (30) minutes to present its argument. ORDERED by Judge Gregory B. Williams on 11/4/2022. Associated Cases: 1:22-cv-00478-GBW, 1:22-cv-00479-GBW, 1:22-cv-00481-GBW, 1:22-cv-00482-GBW (etg) (Entered: 11/04/2022)
11/08/2022	43	Letter to The Honorable Gregory B. Williams from Jimmy Chong regarding being excused from the December 14, 2022 Hearing - re (39 in 1:22-cv-00478-GBW, 39 in 1:22-cv-00478-GBW, 40 in 1:22-cv-00482-GBW, 40 in 1:22-cv-00482-GBW, 40 in 1:22-cv-00479-GBW, 40 in 1:22-cv-00479-GBW, 42 in 1:22-cv-00481-GBW, 42 in 1:22-cv-00481-GBW) Order,, Set Hearings,. (Chong, Jimmy) (Entered: 11/08/2022)
11/17/2022	44	ORAL ORDER: For purposes of analyzing the motion to dismiss based on invalidity pursuant to 35 U.S.C. § 101, IT IS HEREBY ORDERED that, no later than November 30, 2022, each side shall file a one (1) page letter identifying which U.S. Supreme Court or Federal Circuit case(s) it contends is most similar to the patent(s)-at issue. ORDERED by Judge Gregory B. Williams on 11/17/22. Associated Cases: 1:22-cv-00478-GBW et al. (ntl) (Entered: 11/17/2022)
11/30/2022	45	Letter to The Honorable Gregory B. Williams from Jimmy Chong and William P. Ramey III regarding In response to Court's November 17, 2022 Order - re (41 in 1:22-cv-00478-GBW, 34 in 1:22-cv-00484-GBW, 44 in 1:22-cv-00481-GBW, 44 in 1:22-cv-00480-GBW, 42 in 1:22-cv-00479-GBW, 42 in 1:22-cv-00482-GBW) Order,. (Attachments: # 1 Exhibit) (Chong, Jimmy) (Entered: 11/30/2022)
11/30/2022	46	Letter to The Honorable Gregory B. Williams from Jeremy D. Anderson regarding Letter Brief Requested by Court in November 17, 2022 Oral Order. (Anderson, Jeremy) (Entered: 11/30/2022)
12/14/2022		Minute Entry for proceedings held before Judge Gregory B. Williams - Oral Argument held on 12/14/2022. (Court Reporter: Deanna Warner) Associated Cases: 1:22-cv-00478-GBW et al. (ntl) (Entered: 12/14/2022)
01/26/2023	47	Letter to The Honorable Gregory B. Williams from Jeffrey J. Lyons regarding Request for Guidance on Anticipated Motions to Stay by All Defendants. (Lyons, Jeffrey) (Entered: 01/26/2023)
01/30/2023	48	NOTICE OF SERVICE of Defendants' Initial Claim Terms and Proposed Construction filed by Hily Corp., Coffee Meets Bagel, Inc., Grindr, Inc., Down App, Inc..(Anderson, Jeremy) (Entered: 01/30/2023)

02/06/2023	49	MEMORANDUM ORDER: IT IS HEREBY ORDERED that Defendants' Motion to Dismiss (No. 22-478, D.I. 24; No. 22-479, D.I. 25; No. 22- 481, D.I. 27; No. 22-482, D.I. 25) is GRANTED. Signed by Judge Gregory B. Williams on 2/6/23. Associated Cases: 1:22-cv-00478-GBW, 1:22-cv-00479-GBW, 1:22-cv-00481-GBW, 1:22-cv-00482-GBW (ntl) (Entered: 02/06/2023)
02/06/2023		CASE CLOSED (ntl) (Entered: 02/06/2023)
02/07/2023	50	Report to the Commissioner of Patents and Trademarks (Attachments: # 1 order)(ntl) (Entered: 02/07/2023)
03/06/2023	51	NOTICE OF APPEAL to the Federal Circuit of 49 Memorandum and Order, . Appeal filed by Wireless Discovery LLC. (Chong, Jimmy) (Entered: 03/06/2023)
03/06/2023		APPEAL - Credit Card Payment of $505.00 received re 51 Notice of Appeal (Federal Circuit) filed by Wireless Discovery LLC. (Filing fee $505, receipt number ADEDC-4082213.) (Chong, Jimmy) (Entered: 03/06/2023)
03/06/2023		Notice of Appeal and Docket Sheet to US Court of Appeals for the Federal Circuit re 51 Notice of Appeal (Federal Circuit). (twk) (Entered: 03/06/2023)
03/16/2023	52	NOTICE of Docketing Record on Appeal from USCA for the Federal Circuit re 51 Notice of Appeal (Federal Circuit) filed by Wireless Discovery LLC. USCA Case Number 2023-1591. (ntl) (Entered: 03/16/2023)

PACER Service Center

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05/09/2023 12:46:25

PACER Login:	achachkes3748	**Client Code:**	
Description:	Docket Report	**Search Criteria:**	1:22-cv-00481-GBW Start date: 1/1/1975 End date: 5/9/2023
Billable Pages:	8	**Cost:**	0.80

CLOSED,APPEAL,PATENT

U.S. District Court
District of Delaware (Wilmington)
CIVIL DOCKET FOR CASE #: 1:22-cv-00482-GBW

Wireless Discovery LLC v. Hily Corp.
Assigned to: Judge Gregory B. Williams
Related Cases: 1:22-cv-00481-GBW
1:22-cv-00479-GBW
1:22-cv-00480-GBW
1:22-cv-00478-GBW
1:22-cv-00483-VAC
1:22-cv-00484-GBW
1:22-cv-00485-VAC-SRF
Case in other court: 23-01592
Cause: 35:271 Patent Infringement

Date Filed: 04/13/2022
Date Terminated: 02/06/2023
Jury Demand: Plaintiff
Nature of Suit: 830 Patent
Jurisdiction: Federal Question

Plaintiff

Wireless Discovery LLC

represented by **Jimmy C. Chong**
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Wilmington, DE 19808
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LEAD ATTORNEY
ATTORNEY TO BE NOTICED

William P. Ramey , III
Email: wramey@rameyfirm.com
PRO HAC VICE
ATTORNEY TO BE NOTICED

V.

Defendant

Hily Corp.

represented by **Jeremy Douglas Anderson**
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222 Delaware Avenue, 17th Floor
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Philip G. Brown
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PRO HAC VICE
ATTORNEY TO BE NOTICED

Counter Claimant

Hily Corp. represented by **Jeremy Douglas Anderson**
(See above for address)
LEAD ATTORNEY
ATTORNEY TO BE NOTICED

V.

Counter Defendant

Wireless Discovery LLC represented by **Jimmy C. Chong**
(See above for address)
LEAD ATTORNEY
ATTORNEY TO BE NOTICED

Counter Claimant

Hily Corp. represented by **Jeremy Douglas Anderson**
(See above for address)
LEAD ATTORNEY
ATTORNEY TO BE NOTICED

Lance E. Wyatt , Jr.
(See above for address)
PRO HAC VICE
ATTORNEY TO BE NOTICED

Neil J. McNabnay
(See above for address)
ATTORNEY TO BE NOTICED

Noel F. Chakkalakal
(See above for address)
ATTORNEY TO BE NOTICED

Philip G. Brown
(See above for address)
ATTORNEY TO BE NOTICED

V.

Counter Defendant

Wireless Discovery LLC represented by **Jimmy C. Chong**
(See above for address)
LEAD ATTORNEY
ATTORNEY TO BE NOTICED

William P. Ramey , III
(See above for address)
ATTORNEY TO BE NOTICED

Date Filed	#	Docket Text
04/13/2022	1	COMPLAINT filed with Jury Demand against Hily Corp. - Magistrate Consent Notice to Pltf. (Filing fee $ 402, receipt number ADEDC-3851004.) - filed by Wireless Discovery LLC. (Attachments: # 1 Exhibit A, # 2 Exhibit, # 3 Civil Cover Sheet)(smg) (Entered: 04/14/2022)
04/13/2022	2	Notice, Consent and Referral forms re: U.S. Magistrate Judge jurisdiction. (smg) (Entered: 04/14/2022)
04/13/2022	3	Report to the Commissioner of Patents and Trademarks for Patent/Trademark Number(s) US 9,264,875. (smg) (Entered: 04/14/2022)
04/13/2022	4	Disclosure Statement pursuant to Rule 7.1: No Parents or Affiliates Listed filed by Wireless Discovery LLC. (smg) (Entered: 04/14/2022)
04/14/2022	5	Summons Issued as to Hily Corp. on 4/14/2022. (smg) (Entered: 04/14/2022)
04/20/2022		Case Assigned to Vacant Judgeship (2022). Please include initials of VAC after the case number on all documents filed. Associated Cases: 1:22-cv-00478-VAC through 1:22-cv-00485-VAC (rjb) (Entered: 04/20/2022)
04/20/2022	6	ORAL ORDER: This case has been assigned to the District of Delaware's Vacant Judgeship ("VAC"). Detailed information relating to VAC cases may be found in the Court's Announcement of March 3, 2022 and Standing Order No. 2022-VAC-1 (March 9, 2022), which are found on the Court's website. Consistent with the foregoing Announcement and Standing Order, IT IS HEREBY ORDERED that the parties shall file the "Notice of Consent or Absence of Consent to Proceed Before a United States Magistrate Judge," being docketed along with the instant order, no later than sixty (60) days after service of the Complaint on the first defendant that is served. IT IS FURTHER ORDERED that the Notice, Consent, and Referral forms re: U.S. Magistrate Judge jurisdiction, previously docketed in this case, are VACATED. Issued by the Clerk of Court on 4/20/2022. Associated Cases: 22cv478-VAC through 22cv485-VAC (ntl) (Entered: 04/20/2022)
04/20/2022	7	VAC Notice, Consent, Non-Consent, Magistrate Referral Associated Cases: 22cv478-VAC through 22cv485-VAC (ntl) (Entered: 04/20/2022)
04/21/2022	8	SUMMONS Returned Executed by Wireless Discovery LLC. Hily Corp. served on 4/19/2022, answer due 5/10/2022. (Chong, Jimmy) (Entered: 04/21/2022)

04/27/2022	9	STIPULATION TO EXTEND TIME to Answer the Complaint to 06/09/2022 - filed by Wireless Discovery LLC. (Chong, Jimmy) (Entered: 04/27/2022)
04/27/2022		SO ORDERED re 9 STIPULATION TO EXTEND TIME to answer, move, or otherwise respond to the Complaint to 06/09/2022 (Set/Reset Answer Deadlines: Hily Corp. answer due 6/9/2022). ORDERED by Judge Maryellen Noreika on 4/27/2022. (dlw) (Entered: 04/27/2022)
06/03/2022	10	STIPULATION TO EXTEND TIME to Answer the Complaint to 07/09/22 - filed by Wireless Discovery LLC. (Chong, Jimmy) (Entered: 06/03/2022)
06/03/2022		SO ORDERED, re 10 STIPULATION TO EXTEND TIME to Answer the Complaint to 07/09/22 - filed by Wireless Discovery LLC. Reset Answer Deadlines: Hily Corp. answer due 7/9/2022. Signed by Judge Richard G. Andrews on 6/3/2022. (etg) (Entered: 06/03/2022)
06/24/2022	11	VAC Magistrate Non-Consent completed by the parties filed by Wireless Discovery LLC. (Chong, Jimmy) (Entered: 06/24/2022)
06/24/2022	12	ORAL ORDER: The parties having filed the appropriate form advising the Court that they do not unanimously consent to the jurisdiction of a Magistrate Judge, IT IS HEREBY ORDERED that, until further order of the Court, this case will remain assigned to the VAC (2022) docket. IT IS FURTHER ORDERED that this case is referred to Magistrate Judge Sherry R. Fallon solely for the following purposes: (1) to adjudicate discovery (including fact and expert discovery) and protective order disputes; (2) to issue or modify a scheduling order; (3) to review stipulated orders and pro hac vice motions; and (4) to review requests for mediation in cases other than patent and securities cases. Issued by the Clerk of Court on 6/24/22. (ntl) (Entered: 06/24/2022)
06/27/2022		ORAL ORDER RE: 11 : Pursuant to Paragraphs 5(b)-(c) of the Court's Standing Order No. 2022-VAC-1, IT IS HEREBY ORDERED THAT: (1) On or before July 5, 2022, the parties shall: (a) hold a Rule 26(f) conference; and (b) commence discovery. (2) The parties shall file a proposed scheduling order within 30 days of the Rule 26(f) conference and inform the Court as to whether the need for coordinated discovery is anticipated as to related Civil Action No. 22-478-VAC-SRF; 22-479-VAC-SRF; 22-480-VAC-SRF; 22-481-VAC-SRF and 22-484-VAC-SRF. The Court's form scheduling order is posted at www.ded.uscourts.gov/judge/magistrate-judge-sherry-r-fallon. If the parties have any suggestions or modifications to the standard form of scheduling order, they may be included in the proposed order for consideration by the Court. If any disputed issue exists regarding the proposed scheduling order, it shall be noted therein, along with the parties' proposed language on the issue for consideration by the Court; (3) A scheduling teleconference pursuant to Fed. R. Civ. P. 16(b) is set for **9/7/2022 at 11:00 a.m.** Ordered by Judge Sherry R. Fallon on 6/27/2022. (lih) (Entered: 06/27/2022)
06/29/2022	13	Joint Motion for Continuance of Rule 26(f) Conference - filed by Hily Corp.. (Attachments: # 1 Text of Proposed Order)(Anderson, Jeremy) Modified on 6/30/2022 (lih). (Entered: 06/29/2022)
06/30/2022		ORAL ORDER- GRANTING 13 Joint Motion for Continuance of Rule 26(f) Conference to July 15, 2022. Ordered by Judge Sherry R. Fallon on 6/30/2022. (lih) (Entered: 06/30/2022)
07/08/2022	14	MOTION to Dismiss for Failure to State a Claim - filed by Hily Corp.. (Attachments: # 1 Text of Proposed Order)(Anderson, Jeremy) (Entered: 07/08/2022)
07/08/2022	15	OPENING BRIEF in Support re 14 MOTION to Dismiss for Failure to State a Claim filed by Hily Corp..Answering Brief/Response due date per Local Rules is 7/22/2022.

		(Anderson, Jeremy) (Entered: 07/08/2022)
07/08/2022	16	ANSWER to 1 Complaint, with Jury Demand, COUNTERCLAIM against Wireless Discovery LLC by Hily Corp..(Anderson, Jeremy) Modified on 7/11/2022 (lih). (Entered: 07/08/2022)
07/08/2022	17	Disclosure Statement pursuant to Rule 7.1: identifying Corporate Parent Risovel Limited for Hily Corp. filed by Hily Corp.. (Anderson, Jeremy) (Entered: 07/08/2022)
07/08/2022	18	MOTION for Pro Hac Vice Appearance of Attorney Neil J. McNabnay, Lance E. Wyatt, Noel F. Chakkalakal and Philip G. Brown - filed by Hily Corp.. (Anderson, Jeremy) (Entered: 07/08/2022)
07/11/2022		SO ORDERED- re 18 MOTION for Pro Hac Vice Appearance of Attorney Neil J. McNabnay, Lance E. Wyatt, Noel F. Chakkalakal and Philip G. Brown. Signed by Judge Sherry R. Fallon on 7/11/2022. (lih) (Entered: 07/11/2022)
07/12/2022		ORAL ORDER re D.I. 14 Motion: In accordance with the Court's June 24, 2022 Oral Order and paragraph 5(g) of Standing Order No. 2022-VAC-1, the pending motion to dismiss (D.I. 14) does not fall within the scope of the referral to the undersigned judicial officer. Therefore, the motion will be addressed following the assignment of an Article III Judge. Pursuant to paragraph 5(f) of Standing Order No. 2022-VAC-1, the pending motion shall not be grounds to prevent the case from progressing and briefing shall be completed in accordance with the Local Rules. Ordered by Judge Sherry R. Fallon on 7/12/2022. (lih) (Entered: 07/12/2022)
07/13/2022		Pro Hac Vice Attorney Noel F. Chakkalakal, Neil J. McNabnay, Philip G. Brown, and Lance E. Wyatt for Hily Corp. added for electronic noticing. Pursuant to Local Rule 83.5 (d)., Delaware counsel shall be the registered users of CM/ECF and shall be required to file all papers. (mpb) (Entered: 07/13/2022)
07/18/2022	19	AMENDED COMPLAINT for Patent Infringement against Hily Corp.- filed by Wireless Discovery LLC. (Attachments: # 1 Exhibit, # 2 Exhibit, # 3 Exhibit, # 4 Exhibit, # 5 Exhibit, # 6 Exhibit)(Chong, Jimmy) Modified on 7/19/2022 (lih). (Entered: 07/18/2022)
07/19/2022	20	MOTION for Pro Hac Vice Appearance of Attorney William P Ramey, III - filed by Wireless Discovery LLC. (Chong, Jimmy) (Entered: 07/19/2022)
07/19/2022		SO ORDERED- re 20 MOTION for Pro Hac Vice Appearance of Attorney William P Ramey, III. Signed by Judge Sherry R. Fallon on 7/19/2022. (lih) (Entered: 07/19/2022)
07/21/2022		Pro Hac Vice Attorney William P. Ramey, III for Wireless Discovery LLC added for electronic noticing. Pursuant to Local Rule 83.5 (d)., Delaware counsel shall be the registered users of CM/ECF and shall be required to file all papers. (mpb) (Entered: 07/21/2022)
07/27/2022	21	STIPULATION TO EXTEND TIME to ANSWER First Amended Complaint to August 31, 2022 - filed by Hily Corp.. (Anderson, Jeremy) (Entered: 07/27/2022)
07/28/2022		SO ORDERED- re 21 STIPULATION TO EXTEND TIME to ANSWER First Amended Complaint to August 31, 2022. Reset Answer Deadlines: Hily Corp. answer due 8/31/2022. Signed by Judge Sherry R. Fallon on 7/28/2022. (lih) (Entered: 07/28/2022)
07/29/2022	22	ANSWER to 16 Answer to Complaint, Counterclaim by Wireless Discovery LLC.(Chong, Jimmy) (Entered: 07/29/2022)
08/16/2022	23	PROPOSED Scheduling Order by Wireless Discovery LLC. (Chong, Jimmy) Modified on 8/16/2022 (lih). (Entered: 08/16/2022)

08/25/2022	24	MOTION for Jimmy Chong to Withdraw as Attorney - filed by Wireless Discovery LLC. (Chong, Jimmy) (Entered: 08/25/2022)
08/31/2022	25	MOTION to Dismiss for Failure to State a Claim - filed by Hily Corp.. (Attachments: # 1 Text of Proposed Order)(Anderson, Jeremy) (Entered: 08/31/2022)
08/31/2022	26	OPENING BRIEF in Support re 25 MOTION to Dismiss for Failure to State a Claim filed by Hily Corp..Answering Brief/Response due date per Local Rules is 9/14/2022. (Anderson, Jeremy) (Entered: 08/31/2022)
08/31/2022	27	ANSWER to 19 Amended Complaint with Jury Demand Affirmative Defenses and, COUNTERCLAIM against Wireless Discovery LLC by Hily Corp..(Anderson, Jeremy) Modified on 9/7/2022 (lih). (Entered: 08/31/2022)
09/06/2022	28	SCHEDULING ORDER: Joinder of Parties due by 9/1/2022. Amended Pleadings due by 9/1/2022. Discovery due by 9/1/2023. Opening Expert Reports due by 5/1/2023. Rebuttal Expert Reports due by 6/1/2023. Dispositive Motions due by 9/1/2023. Claim Construction Opening Brief due by 11/1/2022. Claim Construction Answering Brief due by 12/1/2022. Claim Construction Reply Brief due by 12/15/2022. Claim Construction Surreply Brief due by 1/3/2023. Joint Claim Construction Brief due by 1/10/2023. IT IS FURTHER ORDERED that the Rule 16 scheduling teleconference set for September 7, 2022 is CANCELLED. Signed by Judge Sherry R. Fallon on 9/6/2022. (Polito, Rebecca) (Entered: 09/06/2022)
09/08/2022		Case Reassigned to Judge Gregory B. Williams. Please include the initials of the Judge (GBW) after the case number on all documents filed. (smg) (Entered: 09/08/2022)
09/09/2022	29	STIPULATION TO EXTEND TIME to Respond to Motion to Dismiss and Claim Construction Deadlines to Certain Dates - filed by Hily Corp.. (Anderson, Jeremy) (Entered: 09/09/2022)
09/12/2022		SO ORDERED, re 29 STIPULATION TO EXTEND TIME to Respond to Motion to Dismiss and Claim Construction Deadlines to Certain Dates filed by Hily Corp. Signed by Judge Gregory B. Williams on 9/12/2022. (etg) (Entered: 09/13/2022)
09/20/2022	30	ANSWER to 27 Answer to Amended Complaint, Counterclaim by Wireless Discovery LLC.(Chong, Jimmy) (Entered: 09/20/2022)
09/26/2022		ORAL ORDER: IT IS HEREBY ORDERED that this matter is no longer referred to Magistrate Judge Fallon. ORDERED by Judge Gregory B. Williams on 9/26/22. Associated Cases: 1:22-cv-00478-GBW-SRF et al. (ntl) (Entered: 09/26/2022)
10/05/2022	31	ANSWERING BRIEF in Opposition re 25 MOTION to Dismiss for Failure to State a Claim filed by Wireless Discovery LLC.Reply Brief due date per Local Rules is 10/12/2022. (Attachments: # 1 Text of Proposed Order, # 2 Exhibit)(Chong, Jimmy) (Entered: 10/05/2022)
10/06/2022	32	PROPOSED ORDER Proposed Protective Order by Wireless Discovery LLC. (Chong, Jimmy) (Entered: 10/06/2022)
10/07/2022		SO ORDERED, re 32 Proposed Protective Order filed by Wireless Discovery LLC. Signed by Judge Gregory B. Williams on 10/7/2022. (etg) (Entered: 10/07/2022)
10/11/2022	33	STIPULATION TO EXTEND TIME to Respond to Motion to Dismiss to October 26, 2022 - filed by Hily Corp.. (Anderson, Jeremy) (Entered: 10/11/2022)
10/12/2022		SO ORDERED, re 33 STIPULATION TO EXTEND TIME to Respond to Motion to Dismiss to October 26, 2022 filed by Hily Corp. Signed by Judge Gregory B. Williams on 10/12/22. (ntl) (Entered: 10/12/2022)

10/19/2022	34	PROPOSED ORDER [Proposed] Scheduling Order by Hily Corp.. (Attachments: # 1 Letter to Hon. Gregory B. Williams Enclosing Proposed Scheduling Order)(Anderson, Jeremy) (Entered: 10/19/2022)
10/21/2022	35	ORAL ORDER: The Court has reviewed the parties' letter of October 19, 2022 and the new proposed scheduling orders. The new proposed scheduling orders do not contain certain language included the Court's form scheduling order which was updated as of October 18, 2022. No later than October 26, 2022, the parties should resubmit their new proposed scheduling orders utilizing the Court's updated form scheduling order as of October 18, 2022. The Court will consider the proposed dates for Pretrial Conferences and Trial in the proposed scheduling orders and adjust those dates if necessary. ORDERED by Judge Gregory B. Williams on 10/21/22. Associated Cases: 1:22-cv-00478-GBW, 1:22-cv-00479-GBW, 1:22-cv-00481-GBW, 1:22-cv-00482-GBW (ntl) (Entered: 10/21/2022)
10/21/2022	36	PROPOSED ORDER [Proposed] Scheduling Order re 34 Proposed Order by Hily Corp.. (Anderson, Jeremy) (Entered: 10/21/2022)
10/26/2022	37	REPLY BRIEF re 25 MOTION to Dismiss for Failure to State a Claim filed by Hily Corp.. (Anderson, Jeremy) (Entered: 10/26/2022)
11/01/2022	38	SCHEDULING ORDER: Fact Discovery completed by 9/1/2023. Status Report due by 5/1/2023. Dispositive Motions due by 12/11/2023. Joint Claim Construction Brief due by 4/17/2023. A Markman Hearing is set for 5/31/2023 at 10:00 AM in Courtroom 6B before Judge Gregory B. Williams. A Final Pretrial Conference is set for 4/5/2024 at 10:00 AM in Courtroom 6B before Judge Gregory B. Williams. A 5-day Jury Trial is set for 4/15/2024 at 09:30 AM in Courtroom 6B before Judge Gregory B. Williams. Signed by Judge Gregory B. Williams on 11/1/22. (ntl) (Entered: 11/01/2022)
11/02/2022	39	REQUEST for Oral Argument by Hily Corp. re 25 MOTION to Dismiss for Failure to State a Claim . (Anderson, Jeremy) (Entered: 11/02/2022)
11/04/2022	40	ORAL ORDER: IT IS HEREBY ORDERED that the Court will hear oral argument on Defendants' Motion to Dismiss, No. 22-478, D.I. 24; No. 22-479, D.I. 25; No. 22-281, D.I 27; No. 22-482, D.I. 25, on December 14, 2022 beginning at 10:00 a.m. in Courtroom 6B. Each side will be allocated up to thirty (30) minutes to present its argument. ORDERED by Judge Gregory B. Williams on 11/4/2022. Associated Cases: 1:22-cv-00478-GBW, 1:22-cv-00479-GBW, 1:22-cv-00481-GBW, 1:22-cv-00482-GBW (etg) (Entered: 11/04/2022)
11/08/2022	41	Letter to The Honorable Gregory B. Williams from Jimmy Chong regarding being excused from the December 14, 2022 Hearing - re (39 in 1:22-cv-00478-GBW, 39 in 1:22-cv-00478-GBW, 40 in 1:22-cv-00482-GBW, 40 in 1:22-cv-00482-GBW, 40 in 1:22-cv-00479-GBW, 40 in 1:22-cv-00479-GBW, 42 in 1:22-cv-00481-GBW, 42 in 1:22-cv-00481-GBW) Order,, Set Hearings,. (Chong, Jimmy) (Entered: 11/08/2022)
11/17/2022	42	ORAL ORDER: For purposes of analyzing the motion to dismiss based on invalidity pursuant to 35 U.S.C. § 101, IT IS HEREBY ORDERED that, no later than November 30, 2022, each side shall file a one (1) page letter identifying which U.S. Supreme Court or Federal Circuit case(s) it contends is most similar to the patent(s)-at issue. ORDERED by Judge Gregory B. Williams on 11/17/22. Associated Cases: 1:22-cv-00478-GBW et al. (ntl) (Entered: 11/17/2022)
11/30/2022	43	Letter to The Honorable Gregory B. Williams from Jimmy Chong and William P. Ramey III regarding In response to Court's November 17, 2022 Order - re (41 in 1:22-cv-00478-GBW, 34 in 1:22-cv-00484-GBW, 44 in 1:22-cv-00481-GBW, 44 in 1:22-cv-00480-GBW, 42 in 1:22-cv-00479-GBW, 42 in 1:22-cv-00482-GBW) Order,. (Attachments: # 1 Exhibit) (Chong, Jimmy) (Entered: 11/30/2022)

11/30/2022	44	Letter to The Honorable Gregory B. Williams from Jeremy D. Anderson regarding Letter Brief Requested by Court in November 17, 2022 Oral Order. (Anderson, Jeremy) (Entered: 11/30/2022)
12/14/2022		Minute Entry for proceedings held before Judge Gregory B. Williams - Oral Argument held on 12/14/2022. (Court Reporter: Deanna Warner) Associated Cases: 1:22-cv-00478-GBW et al. (ntl) (Entered: 12/14/2022)
01/26/2023	45	Letter to The Honorable Gregory B. Williams from Jeffrey J. Lyons regarding Request for Guidance on Anticipated Motions to Stay by All Defendants. (Lyons, Jeffrey) (Entered: 01/26/2023)
01/30/2023	46	NOTICE OF SERVICE of Defendants' Initial Claim Terms and Proposed Construction filed by Hily Corp., Coffee Meets Bagel, Inc., Grindr, Inc., Down App, Inc..(Anderson, Jeremy) (Entered: 01/30/2023)
02/06/2023	47	MEMORANDUM ORDER: IT IS HEREBY ORDERED that Defendants' Motion to Dismiss (No. 22-478, D.I. 24; No. 22-479, D.I. 25; No. 22- 481, D.I. 27; No. 22-482, D.I. 25) is GRANTED. Signed by Judge Gregory B. Williams on 2/6/23. Associated Cases: 1:22-cv-00478-GBW, 1:22-cv-00479-GBW, 1:22-cv-00481-GBW, 1:22-cv-00482-GBW (ntl) (Entered: 02/06/2023)
02/06/2023		CASE CLOSED (ntl) (Entered: 02/06/2023)
02/07/2023	48	Report to the Commissioner of Patents and Trademarks (Attachments: # 1 order)(ntl) (Entered: 02/07/2023)
03/06/2023	49	NOTICE OF APPEAL to the Federal Circuit of 47 Memorandum and Order, . Appeal filed by Wireless Discovery LLC. (Chong, Jimmy) (Entered: 03/06/2023)
03/06/2023		APPEAL - Credit Card Payment of $505.00 received re 49 Notice of Appeal (Federal Circuit) filed by Wireless Discovery LLC. (Filing fee $505, receipt number ADEDC-4082194.) (Chong, Jimmy) (Entered: 03/06/2023)
03/06/2023		Notice of Appeal and Docket Sheet to US Court of Appeals for the Federal Circuit re 49 Notice of Appeal (Federal Circuit). (jfm) (Entered: 03/06/2023)
03/16/2023	50	NOTICE of Docketing Record on Appeal from USCA for the Federal Circuit re 49 Notice of Appeal (Federal Circuit) filed by Wireless Discovery LLC. USCA Case Number 2023-1592. (ntl) (Entered: 03/16/2023)

PACER Service Center

Transaction Receipt

05/09/2023 12:47:06

PACER Login:	achachkes3748	**Client Code:**	
Description:	Docket Report	**Search Criteria:**	1:22-cv-00482-GBW Start date: 1/1/1975 End date: 5/9/2023
Billable Pages:	7	**Cost:**	0.70

CLOSED,APPEAL,PATENT

U.S. District Court
District of Delaware (Wilmington)
CIVIL DOCKET FOR CASE #: 1:22-cv-00484-GBW

Wireless Discovery LLC v. The Meet Group, Inc.
Assigned to: Judge Gregory B. Williams
Related Cases: 1:22-cv-00483-VAC
1:22-cv-00478-GBW
1:22-cv-00481-GBW
1:22-cv-00479-GBW
1:22-cv-00482-GBW
1:22-cv-00480-GBW
1:22-cv-00485-VAC-SRF
Case in other court: 23-01582
Cause: 35:271 Patent Infringement

Date Filed: 04/13/2022
Date Terminated: 02/06/2023
Jury Demand: Plaintiff
Nature of Suit: 830 Patent
Jurisdiction: Federal Question

Plaintiff

Wireless Discovery LLC

represented by **Jimmy C. Chong**
Chong Law Firm, PA
2961 Centerville Rd., Ste 350
Wilmington, DE 19808
302-999-9480
Fax: 302-800-1999
Email: chong@chonglawfirm.com
LEAD ATTORNEY
ATTORNEY TO BE NOTICED

William P. Ramey , III
Email: wramey@rameyfirm.com
PRO HAC VICE
ATTORNEY TO BE NOTICED

V.

Defendant

The Meet Group, Inc.

represented by **Jeffrey J. Lyons**
Baker & Hostetler
1201 North Market Street
Wilmington, DE 19801
(302) 468-7088
Email: jjlyons@bakerlaw.com
LEAD ATTORNEY
ATTORNEY TO BE NOTICED

Andrew E. Samuels
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PRO HAC VICE
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PRO HAC VICE
ATTORNEY TO BE NOTICED

Kevin P. Flynn
Email: kflynn@bakerlaw.com
PRO HAC VICE
ATTORNEY TO BE NOTICED

Counter Claimant

The Meet Group, Inc. represented by **Jeffrey J. Lyons**
(See above for address)
LEAD ATTORNEY
ATTORNEY TO BE NOTICED

Andrew E. Samuels
(See above for address)
ATTORNEY TO BE NOTICED

Douglas A. Grady
(See above for address)
ATTORNEY TO BE NOTICED

Kevin P. Flynn
(See above for address)
ATTORNEY TO BE NOTICED

V.

Counter Defendant

Wireless Discovery LLC represented by **Jimmy C. Chong**
(See above for address)
LEAD ATTORNEY
ATTORNEY TO BE NOTICED

Date Filed	#	Docket Text
04/13/2022	1	COMPLAINT filed with Jury Demand against The Meet Group, Inc. - Magistrate Consent Notice to Pltf. (Filing fee $ 402, receipt number ADEDC-3851012.) - filed by Wireless Discovery LLC. (Attachments: # 1 Exhibit A, # 2 Exhibit B, # 3 Exhibit C, # 4 Civil Cover Sheet, # 5 Related Cases)(srs) (Entered: 04/14/2022)
04/13/2022	2	Notice, Consent and Referral forms re: U.S. Magistrate Judge jurisdiction. (srs) (Entered: 04/14/2022)
04/13/2022	3	Report to the Commissioner of Patents and Trademarks for Patent/Trademark Number(s) US 9,264,875. (srs) (Entered: 04/14/2022)
04/13/2022	4	Disclosure Statement pursuant to Rule 7.1: No Parents or Affiliates Listed filed by

		Wireless Discovery LLC. (srs) (Entered: 04/14/2022)
04/14/2022	5	Summons Issued as to The Meet Group, Inc. on 4/14/2022. (srs) (Entered: 04/14/2022)
04/18/2022	6	SUMMONS Returned Executed by Wireless Discovery LLC. The Meet Group, Inc. served on 4/18/2022, answer due 5/9/2022. (Chong, Jimmy) (Entered: 04/18/2022)
04/20/2022		Case Assigned to Vacant Judgeship (2022). Please include initials of VAC after the case number on all documents filed. Associated Cases: 1:22-cv-00478-VAC through 1:22-cv-00485-VAC (rjb) (Entered: 04/20/2022)
04/20/2022	7	ORAL ORDER: This case has been assigned to the District of Delaware's Vacant Judgeship ("VAC"). Detailed information relating to VAC cases may be found in the Court's Announcement of March 3, 2022 and Standing Order No. 2022-VAC-1 (March 9, 2022), which are found on the Court's website. Consistent with the foregoing Announcement and Standing Order, IT IS HEREBY ORDERED that the parties shall file the "Notice of Consent or Absence of Consent to Proceed Before a United States Magistrate Judge," being docketed along with the instant order, no later than sixty (60) days after service of the Complaint on the first defendant that is served. IT IS FURTHER ORDERED that the Notice, Consent, and Referral forms re: U.S. Magistrate Judge jurisdiction, previously docketed in this case, are VACATED. Issued by the Clerk of Court on 4/20/2022. Associated Cases: 22cv478-VAC through 22cv485-VAC (ntl) (Entered: 04/20/2022)
04/20/2022	8	VAC Notice, Consent, Non-Consent, Magistrate Referral Associated Cases: 22cv478-VAC through 22cv485-VAC (ntl) (Entered: 04/20/2022)
05/06/2022	9	NOTICE of Appearance by Jeffrey J. Lyons on behalf of The Meet Group, Inc. (Lyons, Jeffrey) (Entered: 05/06/2022)
05/06/2022	10	MOTION for Pro Hac Vice Appearance of Attorney Douglas A. Grady, Andrew E. Samuels, Kevin P. Flynn - filed by The Meet Group, Inc.. (Lyons, Jeffrey) (Entered: 05/06/2022)
05/06/2022		SO ORDERED, re 10 MOTION for Pro Hac Vice Appearance of Attorney Douglas A. Grady, Andrew E. Samuels, Kevin P. Flynn filed by The Meet Group, Inc. ORDERED by Judge Colm F. Connolly on 5/6/22. (ntl) (Entered: 05/06/2022)
05/07/2022	11	STIPULATION TO EXTEND TIME to Respond to the Complaint to June 9, 2022 - filed by The Meet Group, Inc.. (Lyons, Jeffrey) (Entered: 05/07/2022)
05/09/2022		SO ORDERED, re 11 STIPULATION TO EXTEND TIME to Respond to the Complaint to June 9, 2022 filed by The Meet Group, Inc. -- Reset Answer Deadline: The Meet Group, Inc. answer due 6/9/2022. ORDERED by Judge Colm F. Connolly on 5/9/22. (ntl) (Entered: 05/09/2022)
05/24/2022		Pro Hac Vice Attorney Kevin P. Flynn, Andrew E. Samuels, and Douglas A. Grady for The Meet Group, Inc. added for electronic noticing. Pursuant to Local Rule 83.5 (d)., Delaware counsel shall be the registered users of CM/ECF and shall be required to file all papers. (mpb) (Entered: 05/24/2022)
06/09/2022	12	MOTION to Dismiss for Failure to State a Claim - filed by The Meet Group, Inc.. (Attachments: # 1 Text of Proposed Order)(Lyons, Jeffrey) (Entered: 06/09/2022)
06/09/2022	13	OPENING BRIEF in Support re 12 MOTION to Dismiss for Failure to State a Claim filed by The Meet Group, Inc..Answering Brief/Response due date per Local Rules is 6/23/2022. (Attachments: # 1 Exhibit A)(Lyons, Jeffrey) (Entered: 06/09/2022)

06/09/2022	14	ANSWER to 1 Complaint, with Jury Demand , COUNTERCLAIM against Wireless Discovery LLC by The Meet Group, Inc..(Lyons, Jeffrey) (Entered: 06/09/2022)
06/09/2022	15	Disclosure Statement pursuant to Rule 7.1: identifying Corporate Parent Parship Meet US Holding, Inc., Corporate Parent Parship Group GmbH, Corporate Parent THMMS Holding GmbH, Corporate Parent 7Love Holding GmbH, Corporate Parent ParshipMeet Holding GmbH, Corporate Parent ProSiebenSat.1 Media SE, Corporate Parent General Atlantic PD GmbH, Corporate Parent General Atlantic PD B.V., Corporate Parent Atlantic Coperatief U.A., Corporate Parent Mediaset Espaa Comunicacin, SA for The Meet Group, Inc. filed by The Meet Group, Inc.. (Lyons, Jeffrey) (Entered: 06/09/2022)
06/21/2022	16	VAC Magistrate Non-Consent completed by the parties filed by The Meet Group, Inc.. (Lyons, Jeffrey) (Entered: 06/21/2022)
06/21/2022	17	ORAL ORDER: The parties having filed the appropriate form advising the Court that they do not unanimously consent to the jurisdiction of a Magistrate Judge, IT IS HEREBY ORDERED that, until further order of the Court, this case will remain assigned to the VAC (2022) docket. IT IS FURTHER ORDERED that this case is referred to Magistrate Judge Sherry R. Fallon solely for the following purposes: (1) to adjudicate discovery (including fact and expert discovery) and protective order disputes; (2) to issue or modify a scheduling order; (3) to review stipulated orders and pro hac vice motions; and (4) to review requests for mediation in cases other than patent and securities cases. Issued by the Clerk of Court on 6/21/22. Associated Cases: 1:22-cv-00478-VAC, 1:22-cv-00480-VAC, 1:22-cv-00484-VAC (ntl) (Entered: 06/21/2022)
06/22/2022		ORAL ORDER RE: (D.I. 10 in 22-cv-478-VAC-SRF); (D.I. 15 in 22-cv-480-VAC-SRF) and (D.I. 16 in 22-cv-484-VAC-SRF): Pursuant to Paragraphs 5(b)-(c) of the Court's Standing Order No. 2022-VAC-1, IT IS HEREBY ORDERED THAT: (1) On or before June 29, 2022, the parties shall: (a) hold a Rule 26(f) conference; and (b) commence discovery. (2) The parties shall file a proposed scheduling order within 30 days of the Rule 26(f) conference and inform the Court as to whether the need for coordinated discovery is anticipated. The Court's form scheduling order is posted at www.ded.uscourts.gov/judge/magistrate-judge-sherry-r-fallon. If the parties have any suggestions or modifications to the standard form of scheduling order, they may be included in the proposed order for consideration by the Court. If any disputed issue exists regarding the proposed scheduling order, it shall be noted therein, along with the parties' proposed language on the issue for consideration by the Court; (3) A scheduling teleconference pursuant to Fed. R. Civ. P. 16(b) is set for **9/7/2022 at 11:00 a.m.** Ordered by Judge Sherry R. Fallon on 6/22/2022. Associated Cases: 1:22-cv-00478-VAC-SRF, 1:22-cv-00480-VAC-SRF, 1:22-cv-00484-VAC-SRF(lih) (Entered: 06/22/2022)
06/22/2022		ORAL ORDER re D.I. 12 Motion: In accordance with the Court's June 21, 2022 Oral Order and paragraph 5(g) of Standing Order No. 2022-VAC-1, the pending motion to dismiss (D.I. 12) does not fall within the scope of the referral to the undersigned judicial officer. Therefore, the motion will be addressed following the assignment of an Article III Judge. Pursuant to paragraph 5(f) of Standing Order No. 2022-VAC-1, the pending motion shall not be grounds to prevent the case from progressing and briefing shall be completed in accordance with the Local Rules. Ordered by Judge Sherry R. Fallon on 6/22/2022. (lih) (Entered: 06/22/2022)
06/23/2022		CORRECTING ENTRY: The motion previously filed as D.I. 18 has been deleted due to document being filed using the wrong event code. Counsel is advised to re-file the motion using the appropriate event code. (lih) (Entered: 06/23/2022)
06/23/2022	18	MOTION for Extension of Time to Respond to Defendant's Motion to Dismiss to 07/07/2022 - filed by Wireless Discovery LLC. (Chong, Jimmy) Modified on 6/23/2022

		(lih). (Entered: 06/23/2022)
06/23/2022		ORAL ORDER- GRANTING 18 Unopposed MOTION for Extension of Time to Respond to Defendant's Motion to Dismiss to 07/07/2022. Set Briefing Schedule: re 12 MOTION to Dismiss for Failure to State a Claim. (Answering Brief due 7/7/2022.) Signed by Judge Sherry R. Fallon on 6/23/2022. (lih) (Entered: 06/23/2022)
06/30/2022	19	ANSWER to 14 Answer to Complaint, Counterclaim by Wireless Discovery LLC.(Chong, Jimmy) (Entered: 06/30/2022)
07/07/2022	20	ANSWERING BRIEF in Opposition re 12 MOTION to Dismiss for Failure to State a Claim filed by Wireless Discovery LLC.Reply Brief due date per Local Rules is 7/14/2022. (Chong, Jimmy) (Entered: 07/07/2022)
07/14/2022	21	STIPULATION TO EXTEND TIME to File Reply Brief in Support of Motion to Dismiss to July 28, 2022 - filed by The Meet Group, Inc.. (Lyons, Jeffrey) (Entered: 07/14/2022)
07/14/2022		SO ORDERED- re 21 STIPULATION TO EXTEND TIME to File Reply Brief. Set Briefing Schedule: re 12 MOTION to Dismiss for Failure to State a Claim. (Reply Brief due 7/28/2022.) Signed by Judge Sherry R. Fallon on 7/14/2022. (lih) (Entered: 07/14/2022)
07/19/2022	22	MOTION for Pro Hac Vice Appearance of Attorney William P Ramey, III - filed by Wireless Discovery LLC. (Chong, Jimmy) (Entered: 07/19/2022)
07/20/2022		SO ORDERED- re 22 MOTION for Pro Hac Vice Appearance of Attorney William P Ramey, III. Signed by Judge Sherry R. Fallon on 7/20/2022. (lih) (Entered: 07/20/2022)
07/21/2022		Pro Hac Vice Attorney William P. Ramey, III for Wireless Discovery LLC added for electronic noticing. Pursuant to Local Rule 83.5 (d)., Delaware counsel shall be the registered users of CM/ECF and shall be required to file all papers. (mpb) (Entered: 07/21/2022)
07/26/2022	23	REPLY BRIEF re 12 MOTION to Dismiss for Failure to State a Claim filed by The Meet Group, Inc.. (Lyons, Jeffrey) (Entered: 07/26/2022)
07/28/2022	24	PROPOSED Scheduling Order by The Meet Group, Inc.. (Lyons, Jeffrey) Modified on 7/29/2022 (lih). (Entered: 07/28/2022)
08/25/2022	25	MOTION for Jimmy Chong to Withdraw as Attorney - filed by Wireless Discovery LLC. (Chong, Jimmy) (Entered: 08/25/2022)
09/06/2022	26	SCHEDULING ORDER: Joinder of Parties due by 9/1/2022. Amended Pleadings due by 9/1/2022. Discovery due by 9/15/2023. Opening Expert Reports due by 9/29/2023. Rebuttal Expert Reports due by 11/10/2023. Expert Discovery due by 1/31/2024. Status Report due by 5/10/2023. Dispositive Motions due by 3/1/2024. Claim Construction Opening Brief due by 2/20/2023. Claim Construction Answering Brief due by 3/20/2023. Claim Construction Reply Brief due by 4/3/2023. Claim Construction Surreply Brief due by 4/17/2023. Joint Claim Construction Brief due by 5/10/2023. IT IS FURTHER ORDERED that the Rule 16 scheduling teleconference set for September 7, 2022 is CANCELLED. Signed by Judge Sherry R. Fallon on 9/6/2022. (Polito, Rebecca) (Entered: 09/06/2022)
09/08/2022		Case Reassigned to Judge Gregory B. Williams. Please include the initials of the Judge (GBW) after the case number on all documents filed. (smg) (Entered: 09/08/2022)
09/15/2022	27	STIPULATION TO EXTEND TIME for the Parties to Submit a Proposed Protective Order to September 30, 2022 - filed by The Meet Group, Inc.. (Lyons, Jeffrey) (Entered: 09/15/2022)

09/20/2022		SO ORDERED, re 27 STIPULATION TO EXTEND TIME for the Parties to Submit a Proposed Protective Order to September 30, 2022 filed by The Meet Group, Inc. Signed by Judge Gregory B. Williams on 9/19/22. (ntl) (Entered: 09/20/2022)
09/21/2022	28	NOTICE OF SERVICE of Initial Disclosures filed by The Meet Group, Inc..(Lyons, Jeffrey) (Entered: 09/21/2022)
09/26/2022		ORAL ORDER: IT IS HEREBY ORDERED that this matter is no longer referred to Magistrate Judge Fallon. ORDERED by Judge Gregory B. Williams on 9/26/22. Associated Cases: 1:22-cv-00478-GBW-SRF et al. (ntl) (Entered: 09/26/2022)
10/05/2022	29	PROPOSED ORDER Proposed Protective Order by Wireless Discovery LLC. (Chong, Jimmy) (Entered: 10/05/2022)
10/06/2022		SO ORDERED, re 29 Stipulated Protective Order. Signed by Judge Gregory B. Williams on 10/6/22. (ntl) (Entered: 10/06/2022)
10/07/2022	30	NOTICE OF SERVICE of Paragraph 3 Disclosures filed by The Meet Group, Inc..(Lyons, Jeffrey) (Entered: 10/07/2022)
11/04/2022	31	Letter to The Honorable Gregory B. Williams from Jeffrey J. Lyons regarding Oral Argument in Related Cases - re 12 MOTION to Dismiss for Failure to State a Claim . (Lyons, Jeffrey) (Entered: 11/04/2022)
11/04/2022	32	STIPULATION TO EXTEND TIME to Produce Core Technical Documents to November 25, 2022 - filed by The Meet Group, Inc.. (Lyons, Jeffrey) (Entered: 11/04/2022)
11/07/2022		SO ORDERED, re 32 STIPULATION TO EXTEND TIME to Produce Core Technical Documents to November 25, 2022 filed by The Meet Group, Inc. Signed by Judge Gregory B. Williams on 11/7/2022. (etg) (Entered: 11/08/2022)
11/09/2022	33	ORAL ORDER: IT IS HEREBY ORDERED that, not later than fourteen (14) days from the date of this Order, the parties shall file a joint amended proposed Scheduling Order in this action consistent with the applicable form Scheduling Order of Judge Williams, which is posted at http://www/ded/uscourts.gov (See Chambers, Judge Williams, Forms). For purposes of efficiency and convenience for the Court, the parties shall adopt the dates in the Scheduling Orders in related cases Nos. 22-478, 22-479, 22-481, and 22-482. If the parties propose dates that deviate from the Scheduling Orders in the related cases, the parties shall file a letter directing the Court to the paragraph numbers in the joint amended proposed Scheduling Order that deviate from the Scheduling Orders in the related cases and provide their reasons for such deviation. Having reviewed the parties' letters (No. 22-480, D.I. 41; No. 22-484, D.I. 31), IT IS ALSO HEREBY ORDERED that Defendants eHarmony, Inc.'s and The Meet Group, Inc.'s request to present argument in support of their respective motions to dismiss (No. 22-480; D.I. 30; No. 22-484, D.I. 12) at the December 14, 2022 hearing in related cases Nos. 22-478, 22-479, 22-481, and 22-482 is GRANTED. ORDERED by Judge Gregory B. Williams on 11/9/22. Associated Cases: 1:22-cv-00480-GBW, 1:22-cv-00484-GBW (ntl) (Entered: 11/09/2022)
11/17/2022	34	ORAL ORDER: For purposes of analyzing the motion to dismiss based on invalidity pursuant to 35 U.S.C. § 101, IT IS HEREBY ORDERED that, no later than November 30, 2022, each side shall file a one (1) page letter identifying which U.S. Supreme Court or Federal Circuit case(s) it contends is most similar to the patent(s)-at issue. ORDERED by Judge Gregory B. Williams on 11/17/22. Associated Cases: 1:22-cv-00478-GBW et al. (ntl) (Entered: 11/17/2022)
11/22/2022	35	Joint Letter to The Honorable Gregory B. Williams from Jeffrey J. Lyons regarding Submission of Proposed Schedule - re 33 Order,,,,,, Set Hearings,,,,,. (Lyons, Jeffrey) (Entered: 11/22/2022)

11/22/2022	36	Joint PROPOSED ORDER Scheduling Order by The Meet Group, Inc.. (Lyons, Jeffrey) (Entered: 11/22/2022)
11/28/2022	37	SCHEDULING ORDER: Fact Discovery completed by 9/1/2023. Status Report due by 5/1/2023. Dispositive Motions due by 12/11/2023. Joint Claim Construction Brief due by 4/17/2023. A Markman Hearing is set for 5/31/2023 at 10:00 AM in Courtroom 6B before Judge Gregory B. Williams. A Final Pretrial Conference is set for 4/5/2024 at 10:00 AM in Courtroom 6B before Judge Gregory B. Williams. A 5-day Jury Trial is set for 4/15/2024 at 09:30 AM in Courtroom 6B before Judge Gregory B. Williams. Signed by Judge Gregory B. Williams on 11/28/2022. (etg) Modified on 11/28/2022 (etg). (Entered: 11/28/2022)
11/30/2022	38	Letter to The Honorable Gregory B. Williams from Jimmy Chong and William P. Ramey III regarding In response to Court's November 17, 2022 Order - re (41 in 1:22-cv-00478-GBW, 34 in 1:22-cv-00484-GBW, 44 in 1:22-cv-00481-GBW, 44 in 1:22-cv-00480-GBW, 42 in 1:22-cv-00479-GBW, 42 in 1:22-cv-00482-GBW) Order,. (Attachments: # 1 Exhibit) (Chong, Jimmy) (Entered: 11/30/2022)
11/30/2022	39	Letter to The Honorable Gregory B. Williams from Jeffrey J. Lyons regarding Response to the Court's November 17, 2022 Oral Orders - re (34 in 1:22-cv-00484-GBW, 44 in 1:22-cv-00480-GBW) Order,. (Lyons, Jeffrey) (Entered: 11/30/2022)
12/02/2022	40	NOTICE OF SERVICE of Core Technical Documents and Sales Figures re 37 Scheduling Order,, filed by The Meet Group, Inc..(Lyons, Jeffrey) (Entered: 12/02/2022)
12/14/2022		Minute Entry for proceedings held before Judge Gregory B. Williams - Oral Argument held on 12/14/2022. (Court Reporter: Deanna Warner) Associated Cases: 1:22-cv-00478-GBW et al. (ntl) (Entered: 12/14/2022)
01/26/2023	41	Letter to The Honorable Gregory B. Williams from Jeffrey J. Lyons regarding Request for Guidance on Anticipated Motions to Stay by All Defendants. (Lyons, Jeffrey) (Entered: 01/26/2023)
01/30/2023	42	NOTICE OF SERVICE of Initial Invalidity Contentions filed by The Meet Group, Inc.. (Lyons, Jeffrey) (Entered: 01/30/2023)
01/30/2023	43	NOTICE OF SERVICE of Initial Claim Terms and Proposed Constructions filed by The Meet Group, Inc..(Lyons, Jeffrey) (Entered: 01/30/2023)
02/06/2023	44	MEMORANDUM ORDER: The Court GRANTS-IN-PART and DENIES-IN-PART eHarmony's Motion to Dismiss, No. 22-480, D.I. 30, and GRANTS The Meet Group's Motion to Dismiss, No. 22-484, D.I. 12. Signed by Judge Gregory B. Williams on 2/6/23. Associated Cases: 1:22-cv-00480-GBW, 1:22-cv-00484-GBW (ntl) (Entered: 02/06/2023)
02/06/2023		CASE CLOSED (ntl) (Entered: 02/06/2023)
02/07/2023	45	Report to the Commissioner of Patents and Trademarks. (Attachments: # 1 order)(ntl) (Entered: 02/07/2023)
02/21/2023	46	MOTION for Attorney Fees - filed by Eharmony, Inc., The Meet Group, Inc.. (Attachments: # 1 Text of Proposed Order)(Lyons, Jeffrey) (Entered: 02/21/2023)
02/21/2023	47	[SEALED] OPENING BRIEF in Support re 46 MOTION for Attorney Fees filed by The Meet Group, Inc..Answering Brief/Response due date per Local Rules is 3/7/2023. (Attachments: # 1 Exhibit A)(Lyons, Jeffrey) (Additional attachment(s) added on 2/22/2023: # 2 Certificate of Service) (ntl). (Entered: 02/21/2023)
03/02/2023	48	MOTION for Extension of Time to File Response/Reply as to 46 MOTION for Attorney Fees - filed by Wireless Discovery LLC. (Attachments: # 1 Text of Proposed Order) (Chong, Jimmy) (Entered: 03/02/2023)

03/06/2023	49	NOTICE OF APPEAL to the Federal Circuit of 44 Memorandum and Order, . Appeal filed by Wireless Discovery LLC. (Chong, Jimmy) (Entered: 03/06/2023)
03/06/2023		APPEAL - Credit Card Payment of $505.00 received re 49 Notice of Appeal (Federal Circuit) filed by Wireless Discovery LLC. (Filing fee $505, receipt number ADEDC-4082171.) (Chong, Jimmy) (Entered: 03/06/2023)
03/06/2023		Notice of Appeal and Docket Sheet to US Court of Appeals for the Federal Circuit re 49 Notice of Appeal (Federal Circuit). (twk) (Entered: 03/06/2023)
03/06/2023	50	ORDER re 48 MOTION for Extension of Time to File Response to 46 MOTION for Attorney Fees filed by Wireless Discovery LLC. Signed by Judge Gregory B. Williams on 3/6/23. (ntl) (Entered: 03/06/2023)
03/15/2023	51	NOTICE of Docketing Record on Appeal from USCA for the Federal Circuit re 49 Notice of Appeal (Federal Circuit) filed by Wireless Discovery LLC. USCA Case Number 2023-1582. (ntl) (Entered: 03/16/2023)
03/21/2023	52	ANSWERING BRIEF in Opposition re 46 MOTION for Attorney Fees filed by Wireless Discovery LLC.Reply Brief due date per Local Rules is 3/28/2023. (Attachments: # 1 Text of Proposed Order)(Chong, Jimmy) (Entered: 03/21/2023)
03/28/2023	53	STIPULATION TO EXTEND TIME to File Reply Brief in Support of Motion for Attorneys' Fees to April 3, 2023 - filed by The Meet Group, Inc.. (Lyons, Jeffrey) (Entered: 03/28/2023)
03/29/2023		SO ORDERED, re 53 STIPULATION TO EXTEND TIME to File Reply Brief in Support of Motion for Attorneys' Fees to April 3, 2023 filed by The Meet Group, Inc. Signed by Judge Gregory B. Williams on 3/29/23. (ntl) (Entered: 03/29/2023)
04/03/2023	54	REPLY BRIEF re 46 MOTION for Attorney Fees filed by The Meet Group, Inc.. (Attachments: # 1 Exhibit A, # 2 Exhibit B)(Lyons, Jeffrey) (Entered: 04/03/2023)
04/05/2023	55	REQUEST for Oral Argument by Eharmony, Inc., The Meet Group, Inc. re (56 in 1:22-cv-00480-GBW, 46 in 1:22-cv-00484-GBW) MOTION for Attorney Fees . (Lyons, Jeffrey) (Entered: 04/05/2023)
04/07/2023	56	REDACTED VERSION of (57 in 1:22-cv-00480-GBW) Opening Brief in Support, (47 in 1:22-cv-00484-GBW) Opening Brief in Support, by Eharmony, Inc., The Meet Group, Inc.. (Lyons, Jeffrey) (Entered: 04/07/2023)

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Description:	Docket Report	**Search Criteria:**	1:22-cv-00484-GBW Start date: 1/1/1975 End date: 5/9/2023
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